PROSPECTUS 2024

POSTGRADUATE INSTITUTE OF AGRICULTIRE (PGIA)

UNIVERSITY OF PERADENIYA

Contents

MESSAGE FROM THE DIRECTOR

As Sri Lanka's premier postgraduate institution for agricultural education and research, PGIA is committed to advancing knowledge and skills, promoting sustainable practices, and preparing the next generation of professionals to tackle the complex challenges in agriculture and allied fields.We take pride in offering a diverse range of postgraduate programs that cater to the evolving needs of students and professionals. With world-class staff, cutting-edge facilities at the Faculty of Agriculture, and a strong network of local and international, public and private collaborators, we provide a comprehensive and enriching academic experience.

Our programs are designed to foster innovation, critical thinking, and leadership skills, empowering our graduates to make significant contributions to both the national and global agricultural sectors. PGIA alumni are recognized for their expertise and skill, dedication, integrity, and adaptability, and we are confident that you, too, will play a vital role in advancing agriculture and allied fields in Sri Lanka and beyond.

As we approach the golden jubilee of the PGIA, I warmly invite you to explore our academic offerings, research opportunities, and potential collaborations.

Together, we can make impactful developments in shaping the future of agriculture for the betterment of society.Thank you for visiting our website. We look forward to welcoming you to PGIA.

Warm regards

Prof. DKNG PushpakumaraDirector,
Postgraduate Institute of Agriculture
University of Peradeniya

VISION

To be a globally competitive Centre of Excellence in postgraduate education and research in agriculture and related fields.

MISSION

To provide high quality postgraduate education and promote pioneering high impact and innovative research to produce competent professionals in agriculture and related fields.

The Postgraduate Institute of Agriculture

The Postgraduate Institute of Agriculture (PGIA) established in 1975, is the oldest of the Postgraduate Institutes in Sri Lanka and highly recognised for higher education and research. Although a part of the University of Peradeniya and linked to its Faculty of Agriculture, the PGIA was formed under a separate Ordinance as a relatively independent body, governed by a Board of Management and administered by a Director.

The PGIA is located within the University of Peradeniya, widely acknowledged as one of the most scenic University campuses in the world. Peradeniya, in turn, lies 8 km from Kandy, the last Royal Capital of Sri Lanka, the centre of the unique Kandyan culture and presently the second city in Sri Lanka. Peradeniya is home to the Royal Botanical Garden acclaimed as one of the best of its kind in the world.

The PGIA over the years has greatly expanded its portfolio and offers programmes and courses in a wide range of disciplines. It has proved to be popular with those seeking postgraduate qualifications in Agriculture and related fields. The PGIA has produced 114 Ph.D., 499 M.Phil., 3516 Master, 295 MBA graduates and 991 Postgraduate Diploma holders since its inception. Alumni of the PGIA have distinguished themselves both locally and internationally.

The PGIA is also renowned for its research programmes. It is the pre-eminent institution for postgraduate research in Agriculture in Sri Lanka; some of its research highlights are presented in this Prospectus. Research students have the opportunity to present their research findings to a wider audience at the Annual Research Congress of PGIA which is always a high-profile international forum.

The PGIA has been able to construct its own buildings and state of the art facilities including classrooms, computer centres and a library. Further details on all these aspects can be accessed via the PGIA website.

This Prospectus will guide you through the process of selecting the best degree and study programme for you and how to apply for admission.

The University of Peradeniya

The University of Peradeniya is the heir to the University of Ceylon, established in July, 1942 in Colombo and Peradeniya. Following a series of transformations since then, the campus at Peradeniya was established as University of Peradeniya in 1952. It is presently the most complete university in Sri Lanka with a developed infrastructure, trained academic staff, fully equipped laboratories and all the specialized units and accessories of a modern university.

For the first time in the history of higher education in Sri Lanka, University of Peradeniya has been ranked in the category of 401 – 500 best universities of the world by the Times Higher Education (THE) world mission ranking for the year 2020. THE world ranking for the year included about 1400 universities in 92 countries of the world. The judgment of ranking is based after evaluation of their core missions such as teaching, research, knowledge transfer and international standing.

It is the largest in terms of student enrolment and the university with the widest range of Faculties and study programmes in Sri Lanka. It is also the only residential university in the Island, located in spacious grounds, exceptionally pleasant surroundings blessed with a mild climate. Its Alumni now serve throughout the world in a range of capacities demonstrating the value of the experience gained at their alma mater.

The PGIA is closely associated with the Faculty of Agriculture which is one of the eight faculties of the University. The Faculty of Agriculture boasts over 100 academics with Doctoral qualifications attached to several departments of study with modern laboratories and other teaching and learning facilities. While these academics and facilities form its core resources, the PGIA also draws academics from other Faculties, other universities and National Institutions into its teaching panel.

The university provides a range of facilities for students to ensure their welfare including a health centre. The sports facilities including playgrounds, an Olympic-sized swimming pool and the unique gymnasium are unrivalled in the national university system. The campus is accessible by regular bus and train services, while canteens on campus offer food at subsidized rates. PGIA students are also eligible to enjoy these facilities. More information on facilities available at the University are detailed below.

"Over 5000 postgraduates produced"

"Over 2000 current students"

"14 % increase in registrations per year"

" 6.5 million (SLR) spent on research in 2018"

Postgraduate degrees offered

Doctor of Business Administration
Doctor of Philosophy

(Minimum of 3 years)

3 years fulltime or equivalent time of research

Master of Philosophy

(Minimum of 2 years)

2 years full time or equivalent time of research

Master of Science

(Minimum of 4 Semesters)

30 credits course work plus one year full time or equivalent time of research

Master of Business Administration

(Minimum of 4 Semesters)

Course work and research

36 credits course work plus one year full time or equivalent time of research

Masters

(Minimum of 2 Semesters)

Course work Only (minimum of 30 credits inclusive of 5 credits Directed Study)

Master of Business Administration

(Minimum of 4 Semesters)

Course work Only

(Minimum of 36 credits + 5 credits Project)

Postgraduate Diploma

Course work only (25 credits)

- The PGIA degrees have been revised regularly to cater to the requirements of the country
- The degrees offered by the PGIA conform with Internationally accepted Standards.
- The degrees are awarded by the University of Peradeniya and conferred at the General Convocation.

Find out more

Postgraduate Institute of Agricuture
http://www.pgia.pdn.ac.lk/

Research

The PGIA is at heart a research institute and even taught Masters programmes contain a significant research component. With modern research facilities and a highly qualified teaching staff, the PGIA attracts a wide variety of researchers from various professions, academia and industries. The mingling of ideas with knowledge makes it the perfect place to broaden one's horizons.

Academics in the Faculties of Agriculture and scientists in National Research Institutions are active researchers in their respective disciplines and obtain funds for this purpose from a variety of sources both in Sri Lanka and elsewhere.

Since these scientists are on the PGIA Panel of teachers, Postgraduate research students work under their supervision to complete their research requirements for M.Sc., M.Phil. and Ph.D. degrees.

Many research projects are often carried out in collaboration with reputed foreign institutions and the students benefit from the exposure and interactions.

The PGIA has the mandate to produce the elite manpower needed by the Agriculture, Food and related sectors in Sri Lanka, and research is therefore given priority by the management.

Accordingly, the PGIA has established a fund (Research Facilitation Fund) from its own resources to provide supplementary funds for student research.

Students of the PGIA have the opportunity to present their research at the Annual Congress of the PGIA and Peradeniya University Research Sessions (IPURSE) which are now major events in Sri Lanka.

The proceedings of the Congress published in the Journal of "Tropical Agricultural Research" and in the PGIA website provides an overview of the research carried out at the PGIA.

Research Facilties Labs

Extensivelab facilities are available to PGIA students. Among these are well equipped chemical analysis laboratories, tissue culture laboratories, PCR machines, spectrophotometers, facilities for state of the art molecular bio labs, DNA finger printing facilities etc.

Library

The Agriculture Library emerged as a unit in the University Library System in 1960s catering to the information requirements of the Faculty of Agriculture.

In 1980 it was amalgamated with the Postgraduate Institute of Agriculture Library and was housed in the second floor of the PGIA Building. The Library was moved to the present four-storied new building in 1996.

The main objective of the PGIA Library is to strengthen the agriculture education and research programmes of the University of Peradeniya with the provision of information in print, non-print and electronic media. With over 40,000 titles and access to many e-journals

(JSTOR, AGORA, CAB Abstracts etc.), this is a "must stop" on every researchers path to success.

Computer Unit

The Computer Unit of the PGIA is regularly expanded and upgraded. It now consists of 03 laboratories with a capacity for over 100 users. Most of the courses require students to use computer facilities as part of their learning process. In addition to this, the unit caters to a large number of workshops, short courses and training programmes, all of which require modern computing facilities. Therefore, it acts as a service centre.

The IT facilities include the latest software for teaching and research purposes. The Computer Unit is also initiating the framework for conducting courses on e-Learning basis.

Affiliations & other Resources

With decades old strong roots, the PGIA has been able to establish relations with government institutions, other universities and private industry. This has given the PGIA a unique opportunity to offer students a wide choice of research bases and resources around Sri Lanka. Some of these even extend beyond the shores of the island.

Tea Research Institute, Medical Research Institute, Veterinary Research Institute, Coconut Research Institute, the Rubber Research Institute, Rice Research and Development Institute, National Zoological parks, Research Institutes & Centres of the Department of Agriculture, Livestock Development Board, government and private farms, fields and laboratories are just a few of the plethora of resources available to PGIA students.






Find out more

Contact Secretaries of relevant Boards of Study for information on Research avenues.
Visit http://www.pgia.pdn.ac.lk/ and navigate to the Boards of Study information under programmes for contact information of Boards of Study Secretaries.

The PGIA Research Facilitation Fund (RFF) will entertain applications during
November - December each year.
Visit http://www.pgia.ac.lk/files/notice/2018/RFF_Application.pdf for more information.

Widening Access

Over the years, the PGIA has produced many hundreds of high quality M.Sc., M.Phils and Ph.Ds. Their research is the wealth of knowledge generated which has made outstanding contributions to the progress in the relevant fields.

The PGIA Annual Congress

The Annual Congress of the PGIA, which was inaugurated in 1989 has become one of the major scientific forum for the postgraduate students and academic staff of the PGIA, scientists in the national research system and University academics.

Over the years, the Congress has evolved into a recognized scientific event in agriculture and related fields, especially in the Asian region. This event highlights the research programmes undertaken by the postgraduate students of the institute as well as those from the region focusing on their scientific merit and provides a forum for critical review of the output.

Research Presentations

Each year research students of the PGIA make research progress presentations. This is an opportunity for them to review their progress and collaborate with other researchers.

This is a successful exercise bringing together students, academics, interested industries and investors under one roof.

Thesis & Journal Management System

The new PGIA Theses are uploaded online, so the world will have access to valued generated knowledge. This will reduce repetition of research and encourage new research.

This is an outstanding method to ensure student research is recognized via an official portal of the PGIA.

PGIA Research Publication Platform (PRPP)

The recently launched web based PGIA Research Publication Platform enables the academic researchers of the PGIA to publish their research online. This platform allows individuals to access and update their various research work, even incorporating video and other media attachments. High quality student research will be selectively included in this system.

International Partnerships

The PGIA has developed international partnerships. Some of the key activities initiated and completed in this regard are:

- Advising and facilitating scholarly linkages for academic and research collaboration with international partners and organizations via student/staff exchange, memoranda of understanding, articulation arrangements, off-shore teaching programmes for academic and research projects and the annual Congress;
- Raising awareness of the Institutes strengths, academic and research achievements and items of global interest via communications with our international partners and overseas contacts.

PGIA students can gain many advantages for further studies, research collaborations and jointly awarded degrees via these partnerships.

Find out more

The PGIA Annual Congress helds in November every year
Visit http://www.pgia.ac.lk/congress/index.php for more information

The Research Publications Facilitation Fund (RPFF) entertain applications every year.
Visit http://www.pgia.pdn.ac.lk/

Scenic Beauty of Peradeniya

The University of Peradeniya is surrounded by some of the most scenic landscapes in the world and earned the title “Garden University” and is located on the outskirts of the city of Kandy. The University of Peradeniya is surrounded by some of the most scenic landscapes in the world and earned the title “Garden University” and is located on the outskirts of the city of Kandy. The 750 hectares of residential campus provides facilities for more than 12,000 students.

Sarachchandra Open Air Theatre

The Sarachchandra open air theatre or the Wala, modelled after the classical Greek. Amphitheatre is built on a natural slope of a hill with a capacity of 3500 spectators. It is the first of its kind in Sri Lanka.

It was the brain child of Prof. Sarachchandra , the pioneering dramatist of Sri Lanka who revitalized and re-generated modern Sinhala Theatre.

Many drama festivals are held year around at the Wala, staging popular plays where the atmosphere is unique and thrilling.

Student Life at Peradeniya

The PGIA is located in the scenic Peradeniya University campus. It is only 2 minutes away from the Galaha junction, the entrance to the University, nestled by the river Mahaweli and surrounded by mountains and lush greens flowing over the landscape, students can experience a truly breathtaking environment. The Peradeniya town, a 10 minute walk away from the PGIA caters to many or all needs and services. The ancient city of Kandy located only 6 km away from the University is another convenience and a site of historical values and attraction. Students will undoubtedly have an unparalleled experience at Peradeniya.

Accommodation

There are many places of accommodation ready to welcome local and international students at Peradeniya.

A Prestigious University with more than half a century of history, the Peradeniya area can cater to almost all requirements and comfort needs of the majority of students. Rooms, apartments and houses are available at reasonable rates.

The PGIA guest house, located a few minutes' drive from the PGIA on the Hanthana range is an affordable, warm stay for most international students until they find permanent accommodation.

Students' Association-PASA

The Postgraduate Agriculture Students' Association (PASA) is the student body of the PGIA. For many years it has been an active promoter of student unity and creativity, carrying out various social and communal activities.

The PASA has planned a year around calendar of activities and as a student of the PGIA, involving with the PASA is an exciting way to make new connections and expand ideas and experiences.

PGIA Alumni

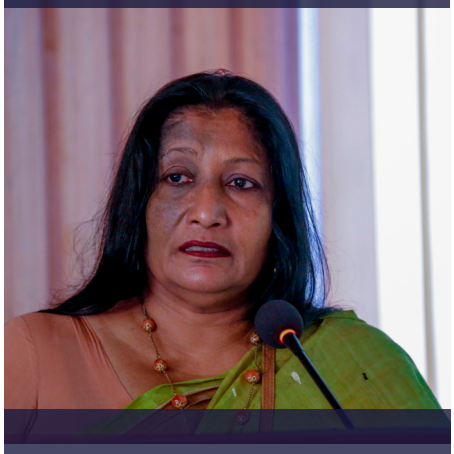
Alumni Association of the Postgraduate Institute of Agriculture (AAPGIA) was inaugurated under the patronage of the past Director Prof. H.P.M. Gunasena on 10th September 1999. During this period a significant number of Alumni have become Life Members of the Association. According to the constitution those who have obtained a postgraduate degree or diploma are eligible to apply for Full Membership. The Office of the AAPGIA is located in the PGIA new building. AAPGIA has sponsored the awarding of prizes for the best research students of the Institute at the Annual Congress.

Prof. Suneth Sooriyapathirana
M.Sc. - B/S in Agric. Biology
Professor
University of Peradeniya

Prof. Rohana Mahaliyanaarachchi
Ph.D. - B/S in Agric. Extension
Senior Professor
University of Sabaragamuwa

Dr. Gamini De Silva
M.Sc. - B/S in Biostatistics
President of Institute of Applied Statistics of Sri Lanka

Mr. Upul Jayaweera
MBA-B/S in Business Administration
Associate Director
National Australia Bank

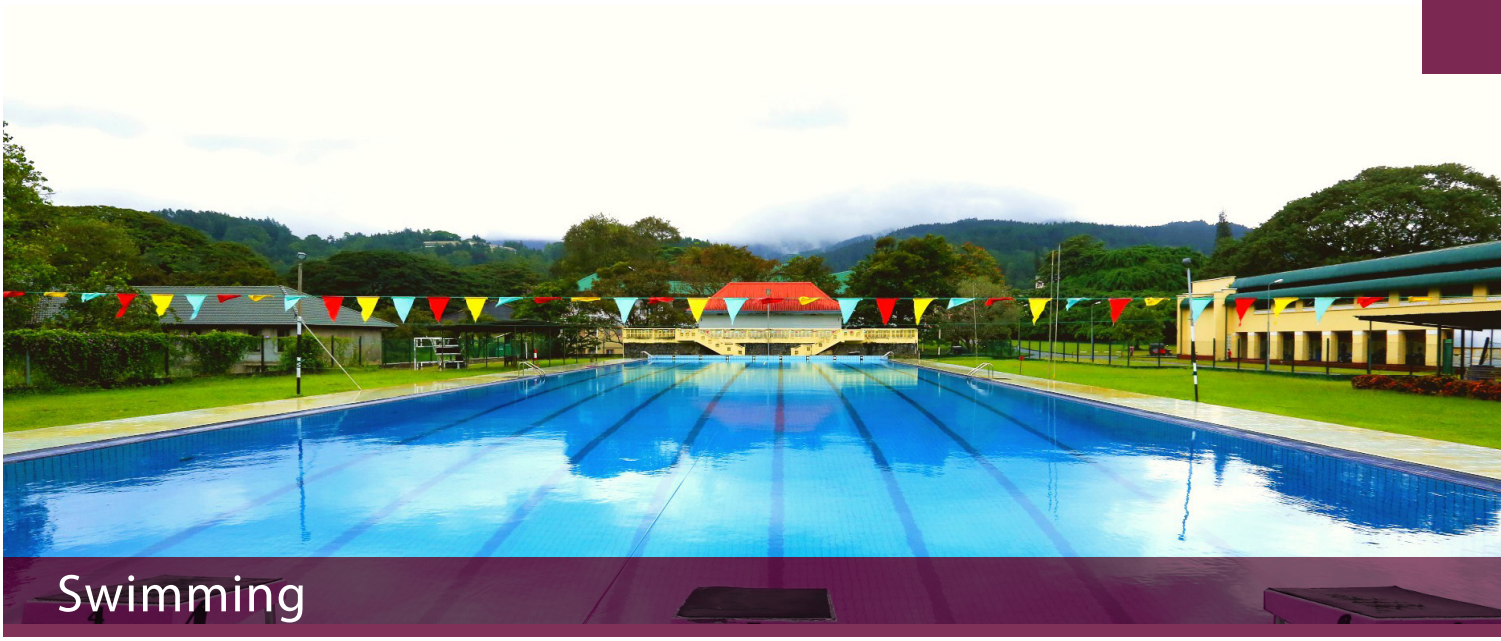


Dr. Vishaka Hidellage
Ph.D. - B/S in Food Science & Tech:
Senior Advisor to UNDP Sri Lanka

Dr. Srimathie Indraratna
M.Phil. - B/S in Soil Science
University of Winnipeg

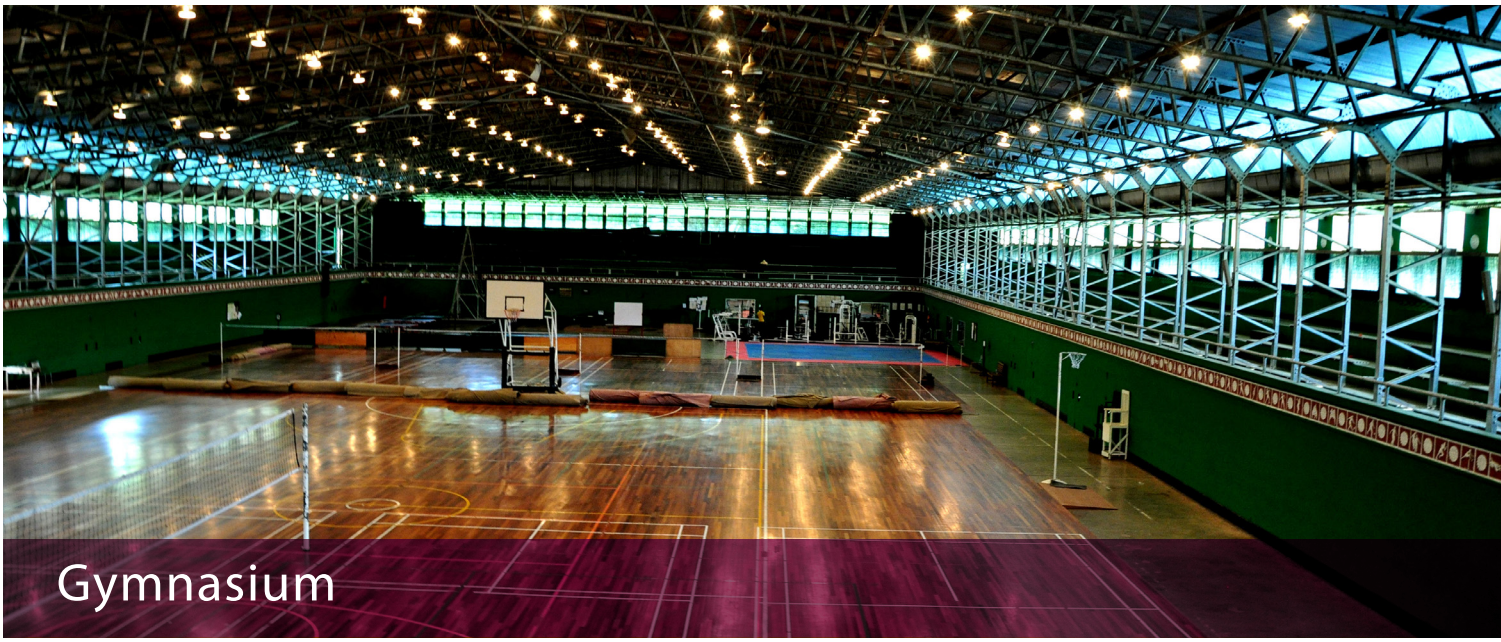
Sports

The University of Peradeniya boasts of the largest sports complex of any University in Sri Lanka. The large areas of land dedicated to sports stands as testament to this claim. As a student of the PGIA, you are entitled to enjoy all sports facilities of the University of Peradeniya available on campus *.



Swimming

The 8 lane swimming pool barely falls short of being Olympic size. At the deep end, dropping to a 18 ft depth the Pool is a great place to relax and keep in shape. Many swimming meets take place and the full time coaches are available to guide you to be a competent swimmer.



Gymnasium

The indoor gymnasium covers an area of about 4000 square meters and provides facilities for Table Tennis, Badminton, Weight Training, Basket ball, Volley ball, Chess, Carom, Martial Arts and many others. The Gymnasium is also used for the Convocation each year for the graduation ceremony and many student and staff led activities including musical shows are held at the Gymnasium.

** Conditions Apply*

Athletics, Cricket and Rugby grounds

The 400 m athletics track is used by young and old alike during mornings and evenings to keep in shape. Athletic sportsmen and women use the grounds to practice for national and international sports events. The Tennis and Basketball courts are also situated here. The Cricket Ground is always busy with many tournaments and training sessions held for university students and staff.

The Rugby and Football ground is the home of the Peradeniya Rugby team. The wonderful view is also a great escape to relax after a tough course or day at the PGIA.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Financial Support

It has been the experience of the PGIA that high achievers come from various economic backgrounds. This is especially true for fresh graduates. As an institute that is dedicated to promote education and globally relevant research, the PGIA has established Research Facilitation Fund (RFF) and Research Publication Facilitation Fund (RPFF) for research students. Loan and credit card facilities for PGIA students have also been negotiated with Government banks.

Research Facilitation Fund of the PGIA

The PGIA established the Research Facilitation Fund (RFF) in 2010 to fund/facilitate research expenses of students.

Research students can obtain funds for their research activities at the M.Phil. and Ph.D. levels for a 2-3 years full time research of national importance.

For more information about the RFF, visit www.pgia.ac.lk/rff

Research Publication Facilitation Fund

The PGIA established a Research Publication Facilitation Fund to facilitate research students to present their research papers in International conferences/symposiums.

Loan Schemes

The PGIA has been able to provide financial aid to students via student loans from some of Sri Lanka's leading commercial banks.

For more information please contact staff of the PGIA Admissions and Registration Branch or visit www.pgia.ac.lk/financial-aid

The PGIA has a multicultural composition of students, enriching its culture and providing students a diverse exposure.

International Students

Over the years the PGIA has been proud to bestow many International postgraduates to the world. As a centre of excellence in postgraduate research and education, the PGIA is always ready to cater its knowledge to international students.

Ravipan Saleepon
Ph.D.
Thailand

Sara Sahibzada
Ph.D.
Afghanistan

Benjamin Odoi
M.Sc.
Ghana

The PGIA offers limited number of partial scholarships for international students.

The PGIA has waived off the application fee from International applicants. Please see page no. 25 for fees structure for international students or visit www.pgia.ac.lk.

Find Out More

Hotlines
International Inquiries :- +94 812388203
RFF :- 081 2388203
Loans :- 0812 388219

Email :- dir@pgia.ac.lk,
dr@pgia.ac.lk

Panel of Teachers

Teachers are drawn not only from the Faculty of Agriculture of the University of Peradeniya but also from other Faculties both at Peradeniya and other Universities as well as researchers from specialized Institutions and industries throughout Sri Lanka. The PGIA at any time will usually have one or more visiting Professors from other countries who will participate in teaching & research.

All courses are conducted by a distinguished panel of teachers who possess proven ability to teach and direct research at postgraduate level having the following attributes:

- Postgraduate research degree usually at Doctoral level in the relevant field
- Post-doctoral teaching/working experience in this field
- Acceptable research portfolio
- Experience in teaching/examination at postgraduate level

It can be seen that the PGIA has a teaching panel with a wide range of expertise and experience from whom the students can benefit.

The full panel with qualifications are available in the PGIA website.

"Over 350 highly qualified teaching staff"

General Information
Academic

Selecting your Degree

The academic activities of the PGIA are conducted by eleven Boards of Study, each established on a disciplinary basis, as shown below.

- Agricultural Biology
- Agricultural Economics
- Agricultural Engineering
- Agricultural Extension
- Animal Science
- Bio-Statistics
- Business Administration
- Crop Science
- Food Science and Technology
- Plant Protection
- Soil Science

Each of the Boards of Study, in turn, offers one or more programmes of study leading to a postgraduate degree. Although the basic requirement for admission to a programme is a bachelor's degree, the prerequisites vary with the particular degree sought and the programme of study. Details regarding these aspects are given later in this Prospectus in the sections that deal with each Board of Study.

Prospective applicants should study these sections carefully and when applying for admission, select the degree, Board of study and Programme of study based on their qualifications and expectations. Applicants should also study the sections dealing with categories of students, transfer of credits and the schedule of fees given later in this Prospectus and in the PGIA Website before making their selections.

General Guide

The PGIA has formulated detailed manuals and guidelines for students. Following are the general guidelines and regulations that govern degrees at the PGIA which the applicants must know prior to registration. The Student Handbook will inform students of the rules and regulations governing academic programmes and progression.

The Manual of Procedures for the management of the PGIA contains the following core documents of interest to students:

1. The PGIA By-Laws: The basic establishment rules of the PGIA
2. Performance Criteria for Award of Degrees: The requirements that a candidate needs to satisfy before becoming eligible for a postgraduate award
3. Detailed Academic Procedures: Some of the rules relating to admission procedures are shown here. The complete documents may be accessed at the PGIA website.

General Requirements for Admission

Master of Science - M.Sc. (CW / CW& R)
Master of Business Administration - MBA (CW / CW & R)
Masters (CW only)
Postgraduate Diploma - PG.Dip.

Admission criteria for degrees shall be a Bachelor's degree from a recognized university or equivalent qualifications acceptable to the Senate of the University of Peradeniya.

In addition to the above, for MBA, professional qualifications equivalent to a degree acceptable to the University Senate is also valid, preference will be given to candidates with managerial experience.

Master of Philosophy - M.Phil.

Admission requirements for an M.Phil. degree shall be a M.Sc. degree (Level 9 or 10) from a recognized university in the relevant field.

A bachelors Hons. degree with a 4 year duration (Level 6) in the relevant field.

*Note that all applicants for M.Phil. shall be initially given provisional registration which shall be confirmed following an assessment of their research plan, competence as a researcher and the viability of the overall research programme.

If a candidate presents the research proposal and is accepted by the Board of Study concerned within the first three months of his/her initial registration, the effective date of registration will be backdated to original provisional registration. If not, the date the proposal is accepted is taken as the commencement of research.

More information on page 29.

Doctor of Philosophy - Ph.D.
Doctor of Business Administration - DBA

Admission requirements for a Doctoral degree shall be an M.Phil. degree (Level 11) OR an M.Sc. (or MBA in the case of Business Administration) degree (Level 9 or 10). A Bachelors hons. degree of 4 year duration (Level 6) in the relevant field with a Minimum GPA of 3.70.

Those already registered for an M.Phil. degree may be upgraded to Ph.D. after a minimum period of 1 year if their research competencies are found to be exceptionally merit.

For a DBA, the requirement shall be an MBA from a recognized university.

Categories of Students

There shall be three categories of students, namely regular, provisional and casual.

a) Regular student
A regular student is a person, who has satisfied the appropriate admission requirements and has been registered to follow a prescribed programme of study leading to a degree.

b) Provisional student
A provisional student is a person who cannot be admitted as a regular student because his/ her academic performance cannot be fully evaluated or who is unable to provide the documentary evidence called for. Such a person showing promise of satisfactory and/or appropriate admission requirements may be admitted as a provisional student and may be transferred to regular student status on the basis of performance at the Institute and/or on submission of the documentary evidence called for. Credits earned may subsequently be transferred to meet the degree requirements.

c) Casual student
A casual student is a person who is enrolled as such by the Institute in order to follow one or more of the courses of study offered by the Institute. The student shall not be a candidate for any degree awarded by the Institute.

Transfer of Credits

Details on the rules governing transfer of credits can be accessed from the Student Handbook.

Teaching, Learning and Assessment

Teaching and learning at the PGIA will be through taught courses, full-time research or a mixture of the two according to the degree and programme being followed. Courses will be taught and assessed on a credit-based system as shown below:

Teaching/learning Method	*Hours per week for one credit*
Lectures	One
Laboratory sessions	Two to three
Field studies/clinical work	Three
Tutorials	Two to three
Industrial Training	Six

Most Classes will be held over the weekend for the convenience of students who are employed.

A wide range of Assessments - both formative and summative - appropriate at postgraduate level will be used in the course work. The work will be graded and grade points calculated according to standard procedures.

Candidates will be required to complete the necessary number of credits and achieve a minimum cumulative Grade Point Average(GPA) of 3.0 to be eligible for an award of a degree.

Details regarding these aspects are shown in the Student Handbook.

Those reading for research degrees will be expected to engage in full time research for the periods shown below:

M.Sc. - Course work + one year research
M.Phil. - minimum of 2 years
Ph.D. - Minimum of 3 years
DBA - Minimum of 3 years

The research work will be assessed every 6 months through progress reports and at the end by a dissertation which will be evaluated formally. Detailed procedures are described in the PGIA documents accessible on the website.

Schedule of Fees

Fees for PG.Dip./Masters/M.Sc./MBA Degrees/M.Phil/Ph.D/DBA - 2024

Peradeniya Branch

Board of Study	Degree Programme	Fees (Rs.) CW	Fees (Rs.) CW & R
Agricultural Biology	Plant Biology Conservation & Breeding Biotechnology	150,000.00 250,000.00	250,000.00 350,000.00
Agricultural Economics	All Programmes Pg. Dip. in Development Practice & Mgt.	125,000.00 70,000.00	225,000.00
Agricultural Engineering	All Programmes	200,000.00	300,000.00
Agricultural Extension	Development Communication & Extension Organizational Management	150,000.00 195,000.00	250,000.00 290,000.00
Animal Science	All Four Programmes	175,000.00	275,000.00
Business Administration	MBA	250,000.00	250,000,00
	Text book fee (from second semester onwards)	150,000.00	
Bio-Statistics	Applied Statistics Bio-Statistics Pg. Dip. in Applied Statistics	200,000.00 125,000.00	300,000.00
Crop Science	Crop Science Environmental Forestry Floriculture & Landscape Architecture Tropical Agriculture Horticuture Plantation Crop Management	175,000.00 175,000.00 175,000.00 400,000.00 175,000.00 175,000.00	275,000.00 275,000.00 275,000.00 500,000.00 275,000.00 275,000.00
Food Science & Technology	Both Programmes	350,000.00	450,000.00
Plant Protection	Both Programmes	150,000.00	250,000.00
Soil Science	All Programmes	150,000.00	250,000.00

Colombo Branch

Board of Study	Degree Programme	Fees (Rs.)	
		CW	CW & R
Bio-Statistics	Applied Statistics Bio-Statistics	250,000.00 250,000.00	350,000.00 350,000.00
Food Science & Technology	Food Science & Technology Food & Nutrition	400,000.00 400,000.00	500,000.00 500,000.00

Fees for Research Degrees Peradeniya & Colombo

Degree Programme	Fees (Rs.)
M.Phil.	250,000.00
Ph.D.	350,000.00
DBA	500,000.00

Fees for Foreign Students

SAARC Countries/ other developing countries

Board of Study	Degree Programme	Fees (USD) CW	Fees (USD) CW & R
Agricultural Biology	Plant Biology Conservation & Breeding Biotechnology	1250 2500	2250 3500
Agricultural Economics	All Programmes	1000	2000
Agricultural Engineering	All Programmes	1500	2500
Agricultural Extension	Development Communication & Extension Organizational Management	1250 1750	2250 2750
Animal Science	All Four Programmes	1250	2250
Business Administration	MBA	2500	2500
	Text book fee (from second semester onwards)	700	700
Bio-Statistics	All programmes	1500	2500
Crop Science	Tropical Agriculture Other programmes	4000 1500	4000 2500
Food Science & Technology	Both Programmes	1500	2500
Plant Protection	Both Programmes	1250	2250
Soil Science	All Programmes	1250	2250
M.Phil.Programme		2500	
Ph.D. Programme		3500	

Other countries

Programme	Other Countries (US $)
PG Diploma	3000.00
All Masters Degree Programmes (CW only)	4000.00
All M.Sc. Programmes (CW & R)	6000.00
MBA (CW)	6000.00
MBA (CW & R)	8000.00
MBA Text Books	700.00
M.Phil.Programme	6000.00
Ph.D. Programme	8000.00

* Semester fees for 4 semesters

Partial scholarships on programme fees are available for high caliber foreign students upon strong recommendation of the relevant Board of Study.

Other Fees

Fee *	Local (Rs.)	Foreign USD
Application Fee	3000.00	.....
Administrative Fee*	14000.00	1200.00
Annual Congress (per year)	1500.00	10.00
Comprehensive Examination (per attempt)	13000.00	75.00*
Thesis Defence Examination (per attempt)	13000.00	75.00*
Refundable Library Deposit (per programme)	5000.00	50.00
Non-refundable Library Fee (per programme)	3000.00	15.00
Prequisite/ Casual/Audit per credit unit	2500.00	20.00
Transcript		
Within Sri Lanka , Issued to student or officials	1500.00	
Outside Sri Lanka issued to the student or issued to officials	3000.00	20
Detailed Certificate	1000.00	10.00
Provisional Certificate/ Letter of reference/ Covering letter	500.00	10.00
Make-up Examination Fee	5000.00	25.00

How to Apply

Multiple modes of application have been provided for the applicants convenience. Applying online is preferred and quick.

* For categories of students, see page 23

Filling an Application Form

Applications can be made on the standard form that can be downloaded from the website (http://www.pgia.ac.lk/) or obtainable from the PGIA office on payment of a prescribed fee and should be submitted to the address below, preferably by registered post.

Deputy Registrar, Postgraduate Institute of Agriculture,
PO Box 55, Old Galaha Road,
Peradeniya,
Sri Lanka

An application processing fee of Rs. 3000.00 is charged per application.

Online Applications (*http://www.pgia.ac.lk/howtoapply.php*)

Visit the application portal at http://www.pgia.ac.lk/howtoapply.php-> enter your login credentials (NIC/PP and password) -> fill the online application -> print generated application and paying-in vouchers -> pay Rs. 3000/- to Peoples' Bank using vouchers & endorse them -> post/ handover the original voucher & deposit slip to the PGIA for confirmation.

Application for Admission as a Regular Student

The Institute will call for applications through notices in the national media indicating the period within which applications will be entertained each year. Every application for admission shall be made on the prescribed form obtained from the Institute, indicating the degree, Board of Study and programme applied for. Each application shall be considered by the appropriate Board of Study against the basic rules of admission described earlier and may require an applicant to appear for an interview. The selection of an applicant for admission shall depend upon the academic background and the capacity for higher studies as disclosed by transcripts of previous degrees and the referees' reports submitted in support of the application. The appropriate Board of Study will recommend a programme of study for each applicant selected for admission to the Institute. If the minimum number of students required to conduct a given programme of study is not met, the programme will not be held for that year. The students in such a case will be advised to follow alternate programmes.

Applications for Enrolment as a Casual Student

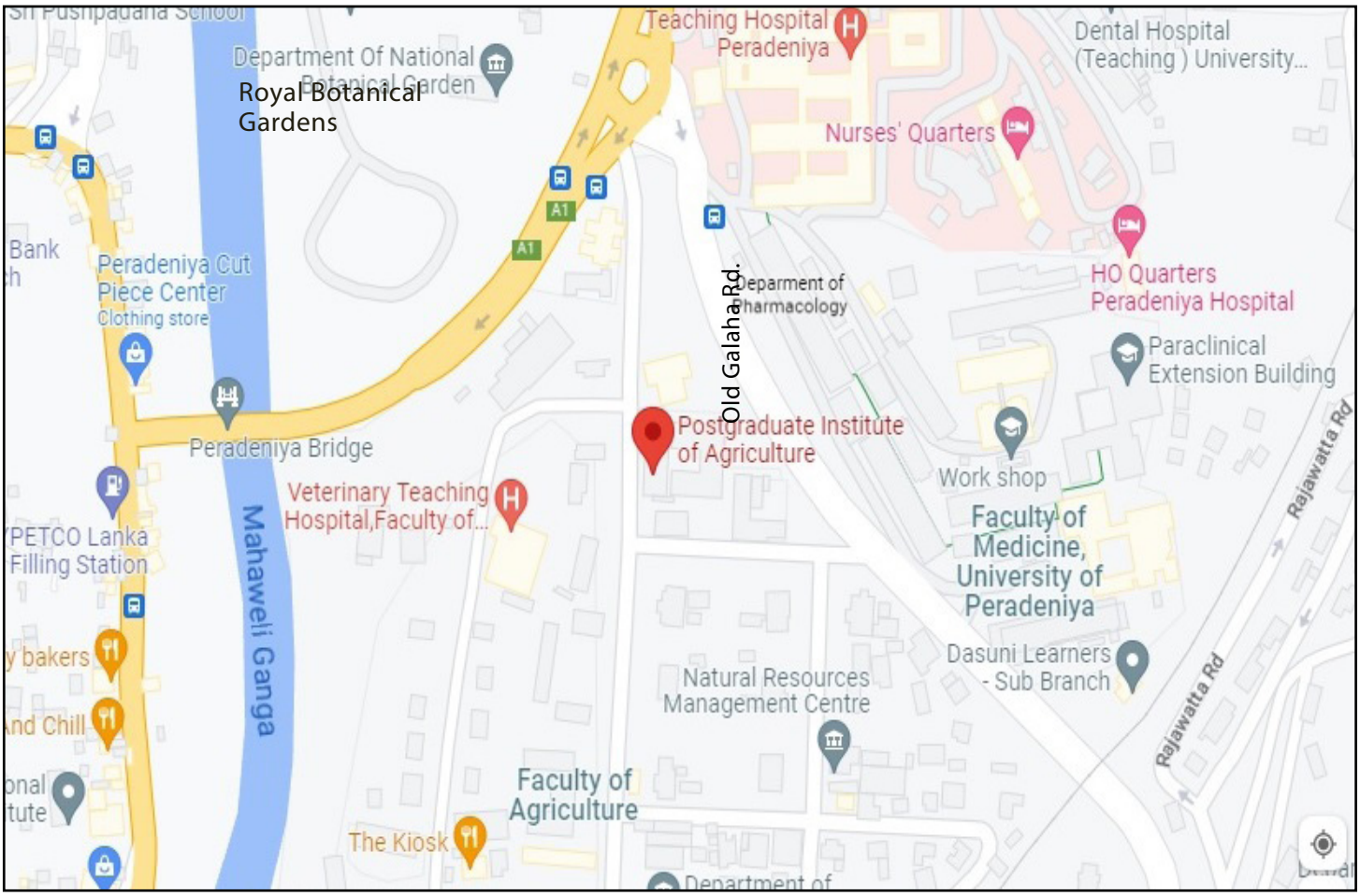
Every application for enrolment as a casual student shall be made in a formal letter to the Director clearly indicating the purpose of the intended enrolment as well as the applicant's academic or professional background. The Director shall determine whether the applicant could benefit from the course or courses of study and make a suitable recommendation to the Board of Management. A person who has been permitted to enrol as a casual student must at the time of enrolment pay all fees and deposits in respect of each semester as specified by the PGIA. This rule shall also apply to all persons including any permanent or temporary members of the academic staff of the University who may wish to follow certain courses as preparation or value addition to a research degree or as part of postgraduate programmes carried out in other Institutes or Faculties. No student shall continue as a casual student for more than two semesters. A casual student shall not be enrolled for more than 9 credit units per semester.

Aptitude test

Every M.Sc. applicant is required to pass an Aptitude Test conducted by the Institute, prior to admission. The result is valid for two consecutive years from the date of examination.

Getting to the Institute

Getting to the institute is a delightful venture, climbing mountains, crossing rivers, passing castles and temples.



Arriving at the institute is convenient and easy. Coming from the Kandy City on the A1 towards Colombo, 6 km from the city you see the Royal Botanical Gardens, from where just 100 m away you reach the entrance to the University, the Galaha Junction on your left.

Coming from Colombo, passing the Peradeniya town and crossing the bridge over the river Mahaweli, you find the Galaha Junction on your right.

The Galaha Junction is the gateway to the PGIA and you can easily find your way here once you walk down the Old Galaha Road, by the Peradeniya Post office.

Boards of Study and the Programmes on offer - 2024

The academic programmes leading to postgraduate degrees are conducted by eleven Boards of Study which correspond to the different disciplines in Agriculture.

The Board of Study (BS) is the authority for the curriculum and for teaching, learning and assessment (TLA) methods for each of the programmes and courses in their speciality and is the custodian of the programme details and course capsules.

Each Board of Study is comprised of the

a) Director of the Institute,

b) a Professor and four other teachers in the appropriate speciality in agriculture nominated from among its teachers in that speciality by the Faculty of Agriculture of the University and

c) three members appointed by the Board of Management from among persons of eminence in the appropriate speciality in agriculture and related fields

d) one Senior Professor, Professor or Senior Lecturer of each speciality not exceeding three from among the Faculty of Agriculture of each University nominated by the respective Faculty Board from among their members, appointed by the Board of Management.

Each BS also offers full-time research degrees (M.Phil./Ph.D.) usually in the areas of National Importance.

Every prospective applicant should study these sections carefully and decide the degree programme to which they wish to gain admission. These details must be completed in the application for admission. Please note that each programme will have certain prerequisite*/ foundation*/ compulsory/ elective courses which the student will have to follow.

* Charges apply

This section of the Prospectus describes the programmes of study offered by each BS; the description contains the following information for each programme:

- Title and introduction
- Key features of the programme
- Number of credits
- List of courses
- Admission requirements
- Description of the ongoing research programmes and highlights of past research.

Further details in respect of the courses can also be accessed on the website.

M.Phil. & Ph.D. Programmes offered by the Boards of Study

All Boards of Study of the PGIA offer M.Phil. & Ph.D. degrees. The research pursued are in line with the objectives of the Boards of Study and are aligned with the national and global requirements. These prestigious degrees require a researcher of high calibre, willing to meet the standards placed on quality, relevance and originality of the research.

Degree of Master of Philosophy

Admission Requirements:

Applicants must possess an M.Sc. /MBA degree or an equivalent qualification acceptable to the Senate of the University of Peradeniya. However, since some programmes require a strong background in a particular field of study, preference is given to students who possess such qualifications. The recommendation in this respect will be at the discretion of the relevant Board of Study. Students may be prescribed some courses in the field of a particular discipline by their Supervisor(s) if they deem necessary to bridge the gap between the desired level and the actual level of knowledge of the candidate to undertake the research study.

Duration: Students are required to carry out a research project for a minimum of 2 years of fulltime or equivalent time of research

Degree of Doctor of Philosophy

Admission Requirements: Applicants must possess a Master's degree or an equivalent qualifications acceptable to the Senate of the University of Peradeniya.

Duration: Students are required to carry out a research project for a minimum of 03 years of full time or equivalent time of research

Research Requirements: Students are required to submit a proposal outlining his/her proposed research project to the relevant Board of Study before a student is allowed to commence his/her study leading to M.Phil./Ph.D. Degree. When the research proposal presented to the BS is accepted, the student is registered to pursue his/her M.Phil/Ph.D degree pending approval of the Board of Management of the PGIA. Every student registered to pursue a M.Phil/Ph.D degree must submit in partial fulfilment of the requirements for the M.Phil/Ph.D degree, a thesis based upon independent research conducted on a specific subject falling within the student's field of study.

Effective date of commencement of research: Commencement of the duration of the M.Phil./Ph.D. research project is determined based on the date on which the research proposal is accepted by the Board of Study concerned. The commencement of the duration of research project is reckoned as the original date of registration if a student's proposal is accepted within three months time from the original date of registration. Those whose proposals are accepted after three months duration of the initial registration, the date on which the proposal is accepted will be reckoned as the effective date of commencement of research.

i Find out more

For further information on Degrees and their related rules and regulations please refer the student handbook.

Agricultural Biology

Programmes

- Master of Plant Biology Conservation and Breeding
- Master of Biotechnology
- M.Sc. in Plant Biology Conservation and Breeding
- M.Sc. in Biotechnology
- Master of Philosophy (M.Phil.)
- Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study (BS) in Agricultural Biology is the only Board which caters to the need of producing postgraduates degree in Biological Sciences since the establishment of the PGIA in 1975. Presently, the BS offers postgraduate degrees in the areas of Biology, Biodiversity, Genetics, Plant Breeding and Biotechnology giving a strong exposure to current developments in these fields. The BS concentrates on research and outreach projects that conform to the national and international requirements. The Board has collaborations with the Department of Agriculture and many other national research institutes in the country to foster partnerships to strengthen the postgraduate education in related disciplines. The BS disseminates knowledge, developing skills and attitudes of postgraduate students to enhance the efficiency of agro-based industries towards self sufficiency while minimizing the environmental impact. Furthermore, the Board undertakes cutting-edge research through national and international grants providing opportunities for research students to acquire laboratory skills at the state of art laboratories and research fields conducted at national research institutes secured through collaborations. The Board also conduct various short courses, workshops and training programmes in the fields of Biology and Biotechnology.

Current Research

- Morphological and molecular characterization of plants and microorganisms
- Genetic improvement of rice, tomato, chilli and other economically important crops
- Gene and QTL mapping
- Genome-wide expression analysis for stress response genes in rice
- Assembly of gene regulatory networks in plants
- Comparative genomics of yield related traits in rice
- Cereal grain quality analysis
- Proteome analysis
- Development and validation of molecular markers
- Marker assisted selection in rice

No requirement of prerequisite for Masters Course work only students.
Statistics is required if the basic degree does not include a statistics course or if the grade obtained is below B grade for Research degrees only(M.Sc- CW & R , M.Phil. or Ph.D)

Master of Plant Biology Conservation and Breeding

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: All applicants must possess a Bachelors Degree in Agriculture, Bioscience, Plant Science, Food science or any equivalent qualification from a recognized Institute of Higher Education acceptable to the Senate of the University of Peradeniya.

Overview

This program is designed to provide a broad base in principles and applications in major disciplines of plant physiology, genetics plant breeding, plant systematics, plant genetic resourc conservation/ utilization and plant biotechnology to develop human resources required for the development of agriculture and other sectors of the country .

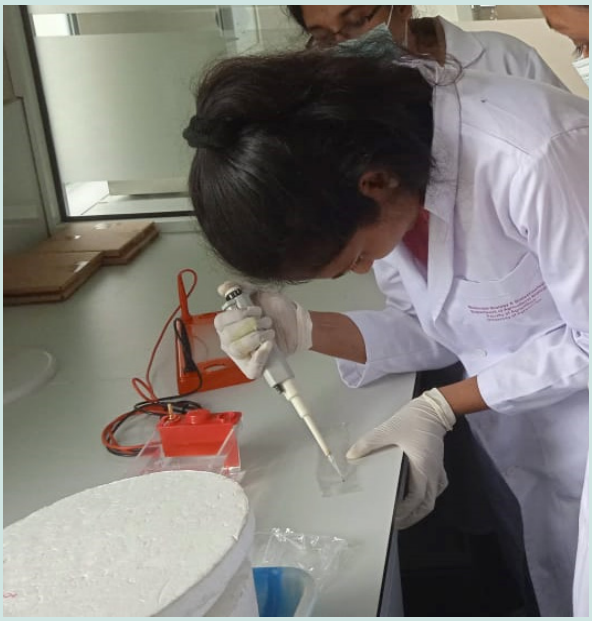
Key features

This Master programme provides an opportunity for each student to acquire the necessary knowledge and skills including hands on experience in techniques related to the above disciplines. This will enable the students to acquire a sound knowledge to develop their career paths and be employable in Sri Lanka and abroad. Furthermore, students who successfully complete this programme would use this Master to gain successful placement in foreign universities for their doctoral degrees.

Code	*Title*	*Credits*	*Option*
First Semester			
AB 5108	Principles of Plant Breeding	2	Compulsory
AB 5110	Crop Genetic Resources	1	Compulsory
AB 5111	Exploration and Characterization of PGR	2	Compulsory
AB 5113	Photosynthesis and Plant Productivity	2	Compulsory
AB 5120	Theory and Techniques of Plant Gene Manipulation	2	Compulsory
AB 5195 *	Practicum 1 - Biology	1	Compulsory
AB 5102	Water Relational and Nutrition	2	Elective
AB 5103	Plant Systematics	2	Elective
AB 5105	Cellular Genetics	2	Elective
AB 5109	Plant Reproductive Biology	1	Elective
AB 5115	Assessment of Genetic Diversity	1	Elective
AB 5116	Plant Biochemistry	2	Elective
AB 5154	Valuing Plant Genetic Resources	1	Elective
AB 5196**	Practicum in Biotechnology I	1	Elective
PP 5151	Plant Molecular Biology	2	Elective
CS 5114	Biodiversity	2	Elective
ST 5154	Statistical Genetics	2	Elective
Second Semester			
AB 5205	Stress Physiology	2	Compulsory
AB 5211	Methods in Plant Genetic Resources Conservation	2	Compulsory
AB 5213	Plant Growth and Development	1	Compulsory
AB 5214	Biotechnology in Plant Improvement	1	Compulsory
AB 5235	Scientific Communication in Biology	1	Compulsory
AB 5295*	Practicum 2 - Crop Improvement	1	Compulsory
AB 5298	Directed Study	5	Compulsory
AB 5209	Nutrional Quality Improvement of Food Crops	1	Elective
AB 5210	Statistical genomics in biotechnology	2	Elective
AB 5215	Population Genetics	2	Elective
AB 5217	Breeding Strategies of Economic Crops	2	Elective
AB 5218	Character Inheritance Mechanisms	1	Elective
AB 5230	Plant Variety Protection, Intellectual Property Rights & Policy Issues	1	Elective
AB 5232	Variety Testing for Adaptability	1	Elective
AB 5296**	Practicum in Blotechnology II	1	Elective
AB 5299	Seminar	1	Elective
CS 5225	Advanced Plant Tissue Culture	2	Elective
ST 5155	Design and Analysis of Experiments	2	Elective

** Each student must take at least One practicum (AB 5195 or AB 5295) to complete the degree or allow to take Both for crediting.*

*** Students who wish to follow practicum 1 and II of Biotechnology Progamme can follow those for crediting by making the relevant payments*

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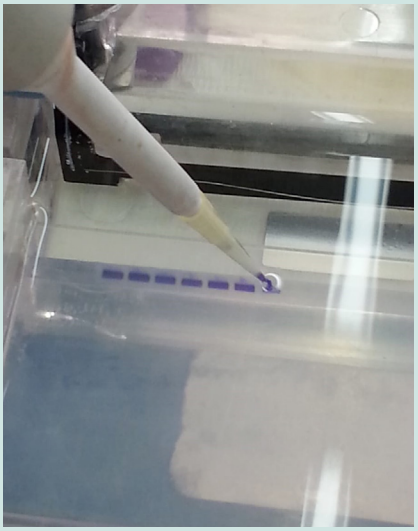
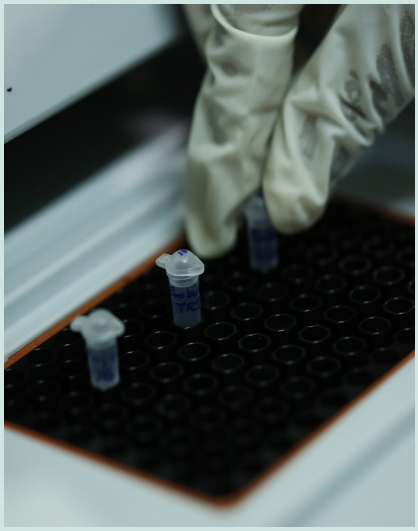




Master of Biotechnology

No. of Credits: 30
Minimum Programme Duration: 2 semesters

Entry Requirements: Applicants must possess a Bachelors Degree in Agriculture, Life Sciences (eg. Bioscience, Plant Sciences, Medicine, Animal & Veterinary Sciences, Microbiology, Biotechnology, Food Science) or any equivalent qualification from a recognized Institute of higher education acceptable to the Senate of the University of Peradeniya.

Overview

Biotechnology is the most demanding and challenging discipline in the biological sciences. With the advent of recombinant DNA technology and its rapid advances, many novel research and employment avenues have opened up in diagnostics and pharmaceutical industries in addition to conventional fields.

Key features

This programme offers a wide range of courses covering the fundamentals in molecular biology to advanced applications in plant, animal, human and industrial biotechnology. The practical exposure provided in the laboratories at the Department of Agricultural Biology equip students with essential-hands–on- skills in molecular biology and biotechnology.

The majority of the students who followed this programme continue their studies in reputed foreign universities and obtain carrier opportunities both national and international institutions.

Code	*Title*	*Credits*	*Option*
First Semester			
AB 5107	Microbial Genetics	2	Compulsory
AB 5116	Plant Biochemistry	2	Compulsory
AB 5119	Molecular Biology	1	Compulsory
AB 5122	Gene Manipulation	2	Compulsory
AB 5196	Practicum in Biotechnology I	1	Compulsory
AB 5101	Cell Biology	2	Elective
AB 5105	Cellular Genetics	2	Elective
AB 5106	Exploring the Genomes: Principles & Techniques	2	Elective
AB 5114	Biosensing	2	Elective
AB 5118	Polygenic Inheritance	2	Elective
AB 5125	Protein Engineering	1	Elective
AB 5126	Enzyme Production Technology	2	Elective
AB 5155	Molecular & Functional Glycobiology	2	Elective
CS 5123	Plant Tissue Culture - Micropropagation	2	Elective
Second Semester			
AB 5222	Gene Expression & Developmental Genetics	2	Compulsory
AB 5228	Molecular Breeding & DNA Fingerprinting	2	Compulsory
AB 5229	Genetically Modified Organisms, Food, Feed and Processed Products and Biosafety	1	Compulsory
AB 5236	Production of Transgenics	1	Compulsory
AB 5252	Bioinformatics	2	Compulsory
AB 5296	Practicum in Biotechnology II	1	Compulsory
AB 5298*	Directed Study	5	Compulsory
AB 5299	Seminar	1	Compulsory
AB 5202	Advanced Genetic Analysis: Genes, Genomes and Networks	2	Elective
AB 5204	In vitro Techniques for Biotechnology	2	Elective
AB 5220	Marine Biotechnology	1	Elective
AB 5223	Cereal Biotechnology	1	Elective
AB 5224	Secondary Metabolite Production	1	Elective
AB 5227	Cellular Immunology	1	Elective
AB 5230	Plant Variety Protection, Intellectual Property Rights & Policy Issues	1	Elective
AB 5233	Nanotechnology in Agriculture	1	Elective
AB 5235	Scientific Communication in Biology	1	Elective
CS 5225	Advanced Plant Tissue Culture	2	Elective

Agricultural Economics

Programmes

Master of Agricultural Economics
Master of Environmental Economics
Master of Natural Resource Management
M.Sc. in Agricultural Economics
M.Sc. in Environmental Economics
M.Sc. in Natural Resource Management
PGD in Development Practice & Management
Master of Philosophy (M.Phil.)
Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study (BS) in Agricultural Economics is the centre of teaching and research in applied economics of the Postgraduate Institute of Agriculture. The BS trains graduates who would be capable in advising and guiding policy makers, industrialists, Non Governmental Organizations, farmers and other interest parties to understand the past and present structure of agriculture. The BS offers three Masters degree programmes, Agricultural Economics (AE), Environmental Economics (EE) and Natural Resource Management (NRM). The Board offers the Master programme in AE to provide students a fundamental understanding of economic principles and their application to identify and solve relevant problems in agriculture and related fields. The programmes also strives to develop appropriate analytical, methodological and communication skills to analyse agricultural problems effectively and explain findings. The objective of the Master programme in EE is to provide rigorous training in the subject to produce professional environmental economists who could conduct environmental policy analysis which is a nationally important aspect. The Master programme in NRM trains professionals for management and coordination of environmental and natural resource projects. The BS also offers a Postgraduate Diploma in Development Practices and Management (PDDPM) and M.Phil. and Ph.D. degree programmes. Those who obtain degrees and diplomas offered by the BS enter into a variety of organization such as governmental ministries, universities, NGOs, research institutes and the private sector organizations as economists, trainers, consultants and managers to use the knowledge and skills gained during their study programmes at the Institute.

Recent research

- Export creation and diversion effects of agricultural trade: implications for the South Asian economies
- An analysis of total factor productivity and sources of growth in the paddy sector of Sri Lanka
- An examination of profit inefficiency of smallholder rubber producers in Sri Lanka
- Analysis of profit efficiency among tea processing factories in Sri Lanka
- Effects of world market prices on the coconut sector in Sri Lanka: An analysis of price transmission elasticities and endogenous trade policy
- Impact of irrigation investments in regional development : Uda Walawe development Project in southern Sri Lanka
- Role of home gardens in achieving food security in Baticaloa district
- Technical change and returns to research in the Coconut sector of Sri Lanka

Master of Agricultural Economics

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Applicants must possess B.Sc. (Agric.) degree with specialization in Agricultural Economics or B.Sc. (AgTech & Mgt.) degree with a specialization in Applied Economics & Business Management or B.A. (Economics) degree. This programme requires a strong background in Economics. Other graduates will be admitted after completion of prerequisite courses that are specified by the Board of Study.

Overview

The Master programme in Agricultural Economics is a social science programme with focus on economic methodologies and tools which equip students for solving problems. As humanity's single largest use of the earth's resources, agriculture is a major driving force in the world economy. With an ever-increasing world population and growing pressure on the world's finite resources, the analytical skills of agricultural economists are as relevant as ever.

Agricultural Economics examines the use of available resources in this complex sector to meet the needs and desires of present and future generations. Sustainability, food security, food safety, environmental quality, agricultural policy reform and rural community development are typical issues that agricultural economists study in a local and global context.

Key features

An extended knowledge of contemporary economic theory, the skills to analyse problems concerning choice and resource allocation on national and international markets, the ability to access and synthesise the relevant economic literature to undertake further research or study in the field of agricultural economics, and the skills to communicate the results of economic analysis to interested parties are the foremost benefits of the Programme.

The Programme facilitates assessment of food economics, international economics and development economics issues and decision-making processes.

Code	*Title*	*Credits*	*Option*
First Semester			
EC 5101	Microeconomic Theory I	2	Compulsory
EC 5102	Mathematical Economics	2	Compulsory
EC 5107	Project Analysis	2	Compulsory
EC 5112	Macroeconomic Theory I	2	Compulsory
EC 5113	Econometrics I	2	Compulsory
EC 5103	Mathematical Programming	2	Elective
EC 5104	Agricultural Marketing I	2	Elective
EC 5105	History of Agricultural Policies in Sri Lanka	2	Elective
EC 5106	Resource and Environmental Economics I	2	Elective
EC 5120	Land Economics	2	Elective
EC 5154	Agricultural Finance	2	Elective
EC 5156	Livestock Economics and Marketing	2	Elective
EC 5199	Seminar	1	Elective
ST 5105	Time Series Analysis	2	Elective
EC 5153	Resource Planing and Management	2	Elective
Second Semester			
EC 5203	Development Economics	2	Compulsory
EC 5204	Applied Production Economics	2	Compulsory
EC 5222	Microeconomic Theory II	2	Compulsory
EC 5223	Econometrics II	2	Compulsory
EC 5298	Directed Study	5	Compulsory
EC 5209	Special Topics in Agricultural Economics	1	Elective
EC 5213	Agricultural Policies in Developing Countries	2	Elective
EC 5214	Agricultural Marketing and Price Analysis	2	Elective
EC 5215	International Trade	2	Elective
EC 5216	Macroeconomic Theory II	2	Elective
EC 5218	Quantitative Policy Analysis	2	Elective
EC 5221	Environmental Valuation	3	Elective
ST 5203	Regression Analysis	2	Elective
EC 5217	Dynamics of Resource Economics	2	Elective
EC 5212	Seminar in Sustainable Development	2	Elective
EX 5208	Social Research Methodology*	2	Elective

**Compulsory for M.Sc.(Course Work & Research), M.Phil. and Ph.D. students*

Master of Environmental Economics

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: This programme requires a strong background in Economics. Applicants must possess B.Sc. (Agric.) degree with specialization in Agricultural Economics or B.Sc. (AgTech & Mgt.) degree with a specialization in Applied Economics & Business Management or B.A. (Economics) degree. A limited number of Mathematics and Engineering graduates will also be admitted for the programme.

Overview

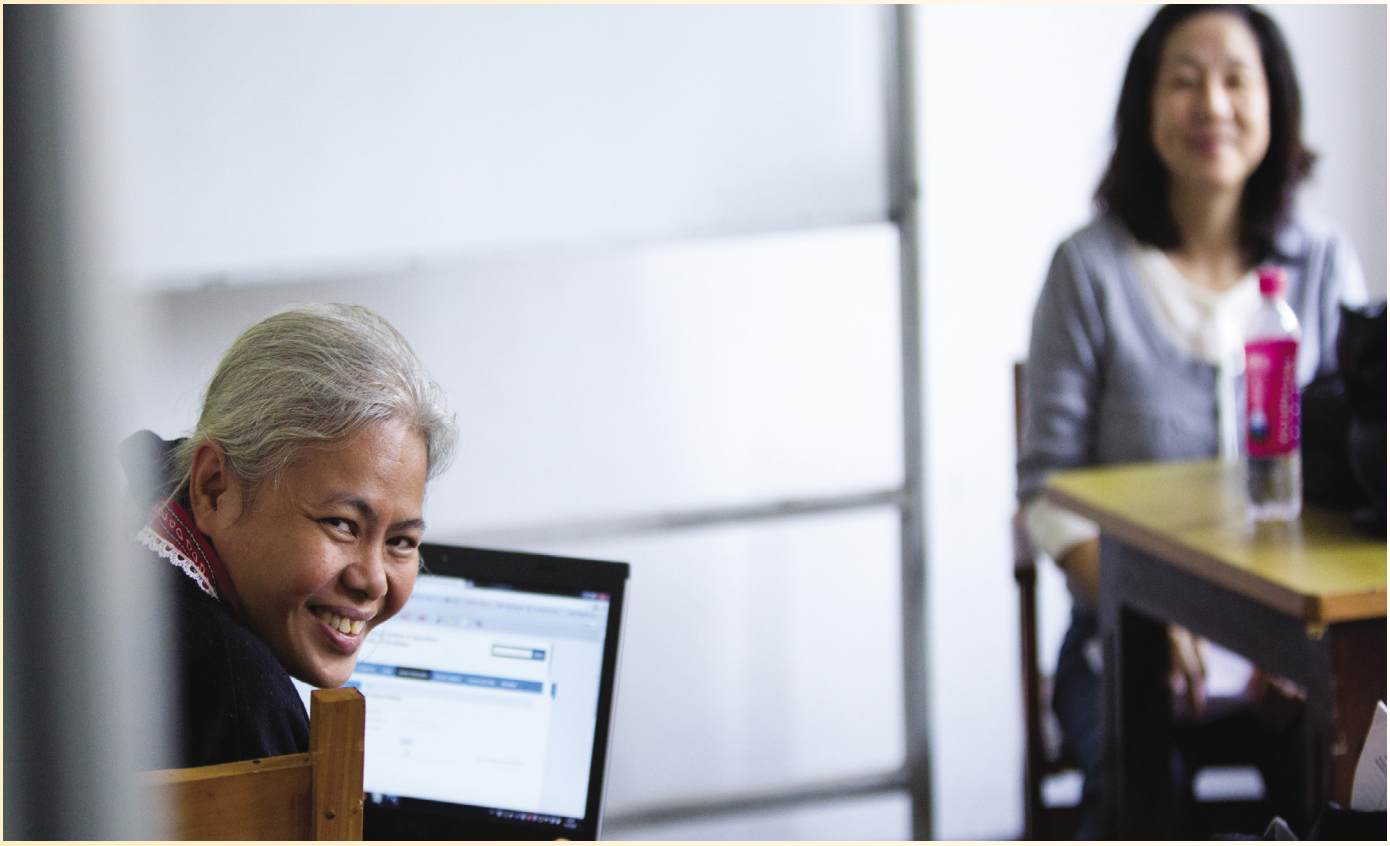
The subject of Environmental Economics plays an increasingly central role in both understanding the causes of and designing policy solutions to contemporary environmental problems. Nowhere is this more apparent than in the case of human-induced climate change. Amongst others, economic analyses have been used to determine the net costs/benefits of different policy scenarios, to better understand how to achieve and sustain international co-operation, and to evaluate the efficiency of different environmental policy instruments. Environmental economics has been instrumental in forming policy across the world. In these, and across a wide range of other issues, from biodiversity and ecosystem loss, air pollution to more broadly the link between the environment and sustainable economic development, the theory and applied tools of environmental economics are uniquely placed to inform and guide decision-makers in addressing environmental challenges.

Code	Title	Credits	Option
First Semester			
EC 5101	Microeconomic Theory I	2	Compulsory
EC 5102	Mathematical Economics	2	Compulsory
EC 5106	Resource and Environmental Economics I	2	Compulsory
EC 5107	Project Analysis	2	Compulsory
EC 5113	Econometrics I	2	Compulsory
EC 5103	Mathematical Programming	2	Elective
EC 5111	Ecology, Conservation and Management of Natural Resources	2	Elective
EC 5112	Macroeconomic Theory I	2	Elective
EC 5199	Seminar	1	Elective
EC 5105	History of Agricultural Policies in Sri Lanka	2	Elective
AE 5152	Environmental Impact Assessment	2	Elective
Second Semester			
EC 5219	Resource and Environmental Economics II	2	Compulsory
EC 5221	Environmental Valuation	3	Compulsory
EC 5222	Microeconomic Theory II	2	Compulsory
EC 5223	Econometrics II	2	Compulsory
EC 5298	Directed Study	5	Compulsory
EC 5212	Seminar in Sustainable Development	2	Elective
EC 5217	Dynamics of Resource Economics	2	Compulsory
AE 5209	GIS for Natural Resources Management	2	Elective
ST 6202	Multivariate Statistical Methods	3	Elective

Key features

The continuing rise in the application of economics to environmental policy formulation has created an increased demand for individuals with state-of-the-art training in environmental and resource economics. As a result, there are promising career opportunities for those who have trained as professional environmental economists: in government, international organizations, industry, NGOs, consultancy and research.

** EX 5208 - Social Research Methodology course (2 credits) is Compulsory for M.Sc.(Course Work & Research), M.Phil. and Ph.D. students*



Master of Natural Resource Management

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: The M.Sc in Natural Resource Management (NRM) is an interdisciplinary degree programme. Applicants with degrees in Pure Sciences (Botany, Zoology, Physics, Chemistry, Mathematics), Applied Sciences (Agriculture, Engineering, Medicine), and Social Sciences are eligible for admission to this programme.

Overview

Sustainable use of natural resources is essential for the survival and development of humankind. The increasing needs and demands for these natural resources combined with the decrease of the finite resources urgently calls for sustainable management. Although Economics plays a vital role in sustainable management of natural resources, it requires an interdisciplinary approach encompassing an in-depth knowledge.

The Master of Science in Natural Resources Management programme is an interdisciplinary programme. It is especially designed to provide students an understanding of the importance of management for sustainable use of natural resources, an understanding of the relationships and the ability to communicate between different disciplines and actors. The programme aims at providing unique knowledge and skills required to solve a number of interdisciplinary challenges related to the management of natural resources.

Key features

Increasing population and growing welfare places pressure on the natural environment and results in problems such as deforestation, overgrazing, and the contamination of land and water resources. The current emphasis on sustainable management across the globe is a consequence of a growing awareness of the impact of modern society on the environment.

As a result, there is a pressing need for people with the ability of applying Natural Resources Management principles and techniques to support decision making for the effective and efficient management of natural resources. In this context, the Master programme in Natural Resources Management aims at providing theory and practice to solve real world natural resource issues using an interdisciplinary approach.

Code	*Title*	*Credits*	*Option*
First Semester			
EC 5109	Resource Management in Tropical Farming Systems	2	Compulsory
EC 5110	Introduction to Economics	2	Compulsory
EC 5111	Ecology, Conservation and Management of Natural Resources	2	Compulsory
EC 5114	Quantitative Methods	2	Compulsory
EC 5212	Seminar in Sustainable Development	2	Elective
EC 5106	Resource and Environmental Economics I	2	Elective
EC 5107	Project Analysis	2	Elective
EC 5199	Seminar	1	Elective
AE 5152	Environmental Impact Assessment	2	Elective
SS 5112	Soil-Plant-Water Systems	2	Elective
AE 5156	Environment and Industry	3	Elective
Second Semester			
EC 5210	Managerial Resource Economics	2	Compulsory
EX 5208	Social Research Methodology	2	Compulsory
EX 5213	Social Impact Assessment	2	Compulsory
EC 5298	Directed Study	5	Compulsory
EC 5153	Resource Planning and Management	2	Compulsory
EC 5221	Environmental Valuation	3	Elective
EC 5219	Resource and Environmental Economics II	2	Elective
AE 5209	GIS for Natural Resources Management	2	Elective

EX 5208 - Social Research Methodology course (2 credits) is Compulsory for M.Sc. (Course work & Research), M.Phil. and Ph.D. students.

Postgraduate Diploma in Development Practice & Management

No. of Credits: 25
Minimum Programme Duration: 2 semesters

Entry Requirements: Applicants must possess a Bachelor's degree or an equivalent qualification acceptable to the Senate of the University of Peradeniya.

Overview

The Diploma in Development Practice and Management will be one (1) year integrated and multi-disciplinary course programme that aims to produce development practitioners with core competencies and essential broad-based knowledge, skills and attributes required for attaining sustainable development. The programme is enriched by drawing knowledge from the social sciences and management. The theoretical component presents relevant theoretical orientations and issue-based perspectives about the nature of human development needs, problems and interventions designed in response to emerging development challenges.

Code	*Title*	*Credits*	*Option*
First Semester			
PDEC 5101	Contemporary Issues in Development	2	Compulsory
PDEC 5102	Principles of Development Management	2	Compulsory
PDEC 5103	Techniques in Development Project Planning	2	Compulsory
EX 5102	Principles of Organization Management	2	Elective
EX 5104	Development Sociology	2	Elective
EX 5105	Community Development	2	Elective
EC 5110	Introduction to Economics	2	Elective
EC 5114	Quantitative Methods	2	Elective
EC 5108	Water Resource Economics I	2	Elective
Second Semester			
PDEC 5201	Research Skills for Community Development	2	Compulsory
PDEC 5202	Agribusiness and Enterprise Development	2	Compulsory
PDEC 5203	Poverty and Social Impact Analysis	2	Compulsory
EX 5206	Participatory Methods for Development	2	Elective
EX 5209	Organizational Development and Change	2	Elective
EC 5209	Special topics in Agricultural Economics	2	Elective

Key features

The programme exposes students to both theoretical and practical experiences in the field of development practice. Thus students are exposed to theoretical perspectives and processes of development around the globe from which they will be able to derive judgment of the forces behind underdevelopment in the third world and formulate strategies for accelerated growth and development. The programme is designed for development practitioners to enable them to develop their skill of analysis to "see beyond what the eye is able to see".

Agricultural Engineering

Programmes

- Master of Agricultural & Bio-systems Engineering
- Master of Geo-Informatics
- Master of Integrated Water Resources Management
- M.Sc. in Agricultural & Bio-systems Engineering
- M.Sc. in Geo-Informatics
- M.Sc. in Integrated Water Resources Management
- Master of Philosophy (M.Phil.)
- Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study (BS) in Agricultural Engineering plays a significant role in agriculture higher education in Sri Lanka by offering three important postgraduate programmes in Integrated Water Resources Management (IWRM), Agricultural and Bio-systems Engineering and Geo-Informatics covering Agricultural Engineering related disciplines. These three postgraduate programmes have been developed considering the national education needs in related sectors and aiming at expanding the education initiatives in the region. The IWRM programme aims at producing multi-disciplinary professionals in water resources management with knowledge and skills from a scientific, technological, economic, social and environmental perspectives for integrated and sustainable use of water resources. The aim of Agricultural and Bio-systems Engineering programme is to produce agricultural and biosystems engineers capable of analysing, synthesizing and developing ingenious solutions for agricultural, biological and biochemical processes using scientific, mathematical and technological methods for increased and sustained productivity. Geo-informatics has been accepted around the world as a technology which benefits a large number of diverse disciplines. Hence, Geo-Informatics postgraduate programme aims at providing theoretical and practical knowledge in the fields of Geographical Information Systems (GIS), Remote Sensing and Global Positioning Systems (GPS) and related disciplines such as surveying, cartography, photogrammetry, spatial statistics etc.

In addition to the formal postgraduate programmes, Board of Study in Agricultural Engineering is very active in organizing training programmes, workshops and symposia for local and regional participants. Since its inception in 2001, the IWRM postgraduate programme has managed to secure fellowship programmes for the M.Phil students through Unilever Water Fellowship programme, Crossing Boundaries Project funded by the Netherlands Government and IDRC-SAWA fellowship project supported by IDRC, Canada. The Board of Study is closely working with the Cap-Net Lanka; the Sri Lankan network of the global network on Capacity Building in Integrated Water Resources Management. The Board of Study has a very strong research programme covering all major aspects in IWRM, Agricultural and Biosystems Engineering and Geo-Informatics. The teaching panel of the Board which consists of eminent professionals from universities, government and private sector institutions has made it an attractive place for Agricultural Engineering postgraduate education in the country.

Recent Research

The Board of Study carries out research in following thematic areas:

- Sustainable processing techniques for grains and perishables
- Climate change, gender and equity in Integrated Water Resources Management
- Groundwater contamination mapping using non destructive techniques
- Studies on urban water management
- Development and evaluation of grain harvesting machines
- Sustainable solutions for waste management and development of renewable energy
- Process control and automation
- Geo-Informatics in environmental conservation and management

Recently concluded student research:

- Environmental, socio-economic, technological and institutional perspectives of sanitation
- Impact assessment of intensified agriculture on stream water quality using interdisciplinary approaches
- Performance evaluation of four wheel tractor driven high capacity combined paddy thresher
- Real time simulation of tea leaves in trough withering using one dimensional heat and mass transfer mathematical model
- The effect of socio-economic and political factors in solid waste disposal and water pollution
- Sustainable water supply and sanitation through financing and institutional intervention
- Performance evaluation of landfill bioreactor "test cell" under dry zone conditions of Sri Lanka
- Pollution mitigation in landfill sites: removal of heavy metals using locally available filter materials
- Development of a microprocessor based embedded system for solar powered reverse osmosis water filtration system

Computer lab with GIS facilities

Master of Agricultural and Bio-Systems Engineering

No. of Credits: 30
Minimum Programme Duration: 3 semesters
Entry Requirements: Candidates possessing a Bachelor's degree, preferably in Agriculture, Engineering or Natural Sciences or any equivalent qualification from a recognized institute of higher education acceptable to the Senate of the University of Peradeniya.

Overview

Crop damage and postharvest losses due to climate change, increasing fuel costs and food security are some of the burning issues in agricultural sector which need immediate attention at present. The Agricultural and Biosystems Engineering degree programme addresses the issues on diligent use of technological inputs to establish sustainable agricultural production systems. Graduates of the M.Sc. occupy leading positions in many private, public and research sectors in Sri Lanka and elsewhere.

Key features

The postgraduate qualification in the field will help strengthen the knowledge base in six major fields; Automation and Robotic Control, Postharvest and Agro-processing, Energy and Waste Management, Farm Machinery, Climate Change & Water Management and Geo-informatics.

The Master programme is meticulously designed to provide the participants with a solid theoretical knowledge and sound practical experience which will make the students well suited for emerging as well as established industries alike.

Code	Title	Credits	Option
First Semester			
AE 5102	Thermodynamics	2	Compulsory
AE 5104	Engineering Drawing	2	Compulsory
AE 5106	Physical Properties of Agricultural Products	2	Compulsory
AE 5109	Soil Mechanics	2	Compulsory
AE 5111	Engineering Mechanics	2	Compulsory
AE 5112	Farm Mechanization	2	Compulsory
AE 5117	Numerical Analysis in Agricultural Engineering Applications	2	Compulsory
AE 5107	Water Quality for Agriculture and Environment	2	Elective
AE 5113	Principles of Farm Machinery	2	Elective
AE 5114	Agricultural Structures and Environment	2	Elective
AE 5115	Electronics and Instrumentation in Agriculture	2	Elective
AE 5116	Farm Machinery Testing and Evaluation	1	Elective
AE 5118	Principles of Post-harvest Biology and Technology	2	Elective
ST 5106	Computer Programming	2	Elective
Second Semester			
AE 5203	Food Process Engineering	2	Compulsory
AE 5204	Power and Energy for Agriculture	2	Compulsory
AE 5206	Fluid Mechanics	2	Compulsory
AE 5202	Water Application Systems	2	Elective
AE 5205	Ecologically Sustainable Industrial Development	1	Elective
AE 5207	Applied Heat Transfer	2	Elective
AE 5209	GIS for Natural Resources Management	2	Elective
AE 5210	Health, Sanitation and Wastewater Management	2	Elective
AE 5211	Hydraulics of Erosion and Sediment Transport	2	Elective
AE 5213	Bioreactor and Bio-Environment Design and Control Systems	2	Elective
AE 5214	Electrical Power and Machines	2	Elective
Second Year First Semester			
AE 5157	Solid Waste Management	2	Compulsory
AE 5198	Directed Study and Seminar	5	Compulsory
AE 5152	Environmental Impact Assessment	2	Elective
AE 5153	Principles of Ergonomics in Agriculture	2	Elective
AE 5154	Application of Remote Sensing in Agriculture	2	Elective
AE 5156	Environment and Industry	3	Elective
AE 5158	Organic Produce Certification and Marketing	1	Elective
AE 5159	Grading Packaging and Transportation of Fruits and Vegetables	2	Elective
AE 5160	Advanced Power and Machinery	2	Elective
AE 5161	Solar Energy Applications in Agriculture	2	Elective
AE 5162	Tillage Engineering	2	Elective
AE 5163	Analysis of Agricultural Systems	2	Elective
AE 5164	Combustion of Biomass	2	Elective
AE 5165	Natural Fibre Technology	2	Elective
AE 5167	Process Control and Automation	2	Elective
AE 6101	Advanced Irrigation Water Management	2	Elective
AE 6102	Advanced GIS and Geo-informatics	2	Elective

Master of Geo-Informatics

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Candidates possessing a Bachelor's degree, preferably in Physical and Biological Sciences, Agriculture, Natural Sciences, Geography, Engineering, Medicine or any equivalent qualification from a recognized institute of higher education acceptable to the Senate of the University of Peradeniya.

Overview

Geo-Informatics has been accepted around the world as a technology which benefits a large number of diverse disciplines. It encompasses three basic technologies, namely Geographical Information Systems (GIS), Remote Sensing (RS) and Global Positioning Systems (GPS). In order to get the maximum benefit out of the fast growing and popular technologies of Geo-Informatics, it is imperative that one should have a general understanding of the related spatial disciplines such as Cartography, Photogrammetry, Surveying, Multimedia Technology and Statistics. Today, in Sri Lanka Geo-Informatics is used mainly for map preparation and rarely used for advanced applications. Hence, it is vital to identify the real potential of this technology to harness the maximum benefits.

Key features

The broad aim of this programme is to develop the required knowledge-based expertise and skills in Geo-Informatics and related spatial sciences to support the development agenda of the country. The core programme includes fundamentals of Remote Sensing, GIS and GPS, the theoretical concepts of other related disciplines, such as surveying, cartography and spatial statistics. It also covers applications of Geo-Informatics in natural resources management, forestry, agriculture and marketing.

Code	*Title*	*Credits*	*Option*
First Semester			
GS 5101	Introduction to Geographical Information Systems (GIS)	2	Compulsory
GS 5102	Introduction to Remote Sensing	2	Compulsory
GS 5103	Spatial Database Management	2	Compulsory
GS 5104	Fundamentals of Global Postioning Systems (GPS)	1	Compulsory
GS 5105	Surveying and Spatial Measurements	2	Compulsory
*ST 5101	Calculus and Matrix Algebra	2	Prerequisite
*ST 5102	Basic Statistics	2	Compulsory/ Prerequisite
ST 5106	Computer Programming	2	Elective
Second Semester			
GS 5201	Fundamentals of Spatial Statistics	2	Compulsory
GS 5202	Thematic Mapping, Cartography and Photogrammetry	2	Compulsory
GS 5203	Spatial Modelling and Analysis	2	Compulsory
GS 5204	Advanced GIS and Applications	3	Compulsory
GS 5205	Advanced Digital Image Processing	2	Compulsory
GS 5206	Microwave Remote Sensing	2	Compulsory
CS 5212	Scientific Writing and Proposal Formation	2	Elective
Second Year First Semester			
GS 5198	Directed Study	5	Compulsory
GS 6102	Advanced Remote Sensing and Applications	2	Compulsory
GS 6103	Recent Advances in Geo-Informatics	2	Compulsory
GS 6104	Spatial Data Infrastructure	1	Compulsory
GS 6101	Statistical Methods for Spatial Data analysis	2	Elective

** No credits will be given for prerequisite courses.*

Agricultural Engineering
research with advanced technology

Master of Integrated Water Resources Management

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Candidates possessing a Bachelor's degree, preferably in Agriculture, Engineering, Humanities, Medicine, Natural Sciences or any equivalent qualification from a recognized institute of higher education acceptable to the Senate of the University of Peradeniya.

Overview

At present, there are numerous government, non-government and private sector organizations actively involved in developing and managing water resources in Sri Lanka. However, most of these organizations are unable to implement projects integrating and harnessing the water resources with ecosystems towards sustainable development and management objectives.

A new generation of scientists, researchers, engineers, geographers, social scientists should be trained in this new field of "Integrated Water Resource Management" enabling them to take up the challenge of providing adequate good quality water to the various water users while maintaining the delicate balance of the natural ecosystems. The Integrated Water Resources Management Programme has been designed to achieve the above goals.

Key features

This postgraduate programme is designed to produce multidisciplinary professionals in water resources management with knowledge and skills from a scientific, technological, economic, social and environmental perspective for integrated and sustainable use of water resources. The courses are designed to address these different perspectives so that students would be able to assess the water resources at river basin scale and allocate for different uses and users, to facilitate effective communication and dialogue among stakeholders to avoid conflicts, address issues, especially in relation to water pollution and employ remedial measures, manage water for irrigation and water supply & sanitation while maintaining the eco-systems, and develop methodologies to implement policies and legislations related to all aspects of water use in the country. The students are also provided with knowledge and skills to facilitate problem based interdisciplinary research in addressing current issues in the water sector.

Code	*Title*	*Credits*	*Option*
First Semester			
AE 5103	Hydrology and Meteorology	3	Compulsory
AE 5105	Water and Society	2	Compulsory
AE 5107	Water Quality for Agriculture and Environment	2	Compulsory
EC 5108	Water Resources Economics I	2	Compulsory
AE 5101	Water for Agriculture	2	Elective
AE 5109	Soil Mechanics	2	Elective
AE 5119	Water and Industry	2	Elective
EC 5107	Project Analysis	2	Elective
ST 5106	Computer Programming	2	Elective
Second Semester			
AE 5210	Health, Sanitation and Wastewater Management	2	Compulsory
AE 5202	Water Application Systems	2	Elective
AE 5206	Fluid Mechanics	2	Elective
AE 5209	GIS for Natural Resources Management	2	Elective
AE 5211	Hydraulics of Erosion and Sediment Transport	2	Elective
AE 5212	Water Supply	2	Elective
AE 6104	Interdisciplinary Field Research Methodology	3	Elective
AE 6105	Gender in IWRM	2	Elective
EC 5208	Water Resource Economics II	2	Elective
Second Year First Semester			
AE 5151	River Basing Planning & Management	2	Compulsory
AE 5152	Environmental Impact Assessment	2	Compulsory
AE 5198	Directed study	5	Compulsory
AE 6101	Advanced Irrigation Water Management	2	Compulsory
AE 5108	Groundwater Development	2	Elective
AE 5154	Application of Remote Sensing in Agriculture	2	Elective
AE 5155	Financing Water Development	2	Elective
AE 6102	Advanced GIS and Geo-informatics	2	Elective
AE 6103	Modelling Hydrological Systems	1	Elective

Agricultural Extension

Programmes

- Master of Development Communication and Extension
- Master of Organizational Management
- M.Sc. in Development Communication and Extension
- M.Sc. in Organizational Management
- Master of Philosophy (M.Phil.)
- Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study (BS) in Agricultural Extension provides postgraduate level training and develops research skills in the areas of Development Communication and Extension, and Organizational Management. These postgraduate programmes are designed to equip and train graduates to excel in the fields of human resource development, project management, organizational management, and agricultural extension and advisory services. Students are prepared for senior positions in the corporate and public sector, local and international development agencies, NGOs (Non-Governmental Organizations), research institutions and faculty positions in the universities. Degree programmes of the BS are highly appreciated on account of several factors such as their relevance to the Sri Lankan context, highly competent teaching panel, adherence to high standards of quality, regular updating of course content. The success of our graduates is seen in various sectors of their employment. The teaching panel consists of experienced personnel drawn from university academics, public, NGOs and corporate sector with expertise and background of higher education in a wide range of disciplines pertaining to management, and agricultural extension and advisory services.

The BS has strengthened its study programmes to enable the graduates to effectively deal with future communication, management and extension challenges, including demand driven approaches such as, human ecology, corporate relations, and use of information communication technology and audio-visual media. Students are required to follow basic courses in Communication, Education, Sociology, Psychology, Organizational Management, Human Resource Management, Marketing Communication and Statistics.

The courses offer training in areas of management and build competencies in management of information systems, production of media material, journalism, leadership development, citizenship behavior, professional skills, business etiquettes and related skills to undertake responsibility and new challenges. These courses are supplemented by additional courses in the specific subject area of interest. Social Research Methodology and data analysis courses are offered for students reading for research degrees.

The following Intended Learning Outcomes (ILO's) are developed for the overall programmes of the BS. The specific ILO's for the course are developed within this context.

1. In the core areas of learning i.e. Development Communication and Extension or Organizational Management,
    i. Explain phenomena using related key concept, principles and theories
    ii. Be aware of contemporary national and global issues and trends
    iii. Possess updated knowledge and understanding by reading recently published material
    iv. Critically assess key agencies responsible for quality service delivery
    v. Individually, realize the learning outcomes of courses taken for credit in the registered postgraduate programme
2. Demonstrate ability to logically and scientifically analyse and draw valid inferences
3. Have excellent professional communication skills in writing and speech using appropriate audio-visual aids
4. Have excellent interpersonal skills of a mature professional
5. Familiar with ethical nuances in the world of work and committed to integrity
6. Able to take an informed stand on issues and defend position based on verifiable evidence

The BS provides supporting services and outreach activities to the development communication, agricultural extension and organizational management services of the state, private and NGO sectors. These services include assistance in the preparation of publications, training of staff, development of computer software, preparation of audio and video programmes, collaboration in planning, policy formulation and evaluation of extension programmes, and project management. With the supervision and guidance of our experienced teaching panel, students have conducted research on topics related to agricultural extension, training and development, information and communication technology, organizational management, and human resource management.

Recent Research

- Role of agricultural extension services in enhancing the livelihood of farmers in the food crop sector of the dry zone of Sri Lanka
- Factors affecting the outreach engagement by academics of the faculties of agriculture in state universities in Sri Lanka
- Development of an integrated information dissemination system for effective delivery of extension services in tea plantation sector in Sri Lanka
- The relationship between spiritual intelligence and leadership styles of managers in the NGO sector in Sri Lanka
- Dairy value chain analysis in the Uva province of Sri Lanka
- The impact of adversity quotient on perceived stress of NGO sector managers in Sri Lanka
- Impact of users' technology readiness and perceived value on mobile phone enabled internet usage in Central province of Sri Lanka

Students experience practical situations through simulation group activities in Corporate Relations course module

Master of in Development Communication and Extension

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Candidates possessing a Bachelor's degree in Social Sciences/Agriculture or any equivalent qualification from a recognized institute of higher education acceptable to the Senate of the University of Peradeniya.

Overview

This programme has been designed to provide the theoretical foundation, develop competencies and interpersonal skills required for planning and implementing agricultural development projects. it lays a foundation through courses in basic social sciences, management and communication skills, and builds upon the application of this knowledge to real world developmental activities that the public, private and non-governmental sectors are involved in. This would benefit both fresh graduates as well as those with relevant field experience.

Key features

The Master Degree in Development Communication and Extension provides students with training in the theory and methods of applied development communication through a broad exposure to the problems of agricultural extension, development communication, education, and community development approaches. It includes basic courses in areas such as communication, psychology and sociology and courses in applied areas such as use and management of information and communication technology, and marketing communication.

The course modules cover contents such as principles of adult education, group dynamics, participatory communication, extension approaches models, project planning in community development, implementation and evaluation of training programmes, design and production of multimedia programmes, journalism, preparation of publications, use of ICT (Information and Communication Technology) and management of databases.

Code	*Title*	*Credits*	*Option*
First Semester			
EX 5101	Principles of Communication	2	Compulsory / Foundation
EX 5103	Adult Psychology	2	Compulsory
EX 5104	Developmental Sociology	2	Compulsory
EX 5106	Communication for Development	2	Compulsory
EX 5110	Developmental Extension and Education	2	Compulsory
EX 5198	Directed Study*	5	Compulsory
EX 5199	Seminar	1	Compulsory
EX 5102	Principles of Organizational Management	2	Elective
EX 5105	Community Development	2	Elective
EX 5107	Organizational Theory and Behaviour	2	Elective
EX 5108	Human Resource Management	2	Elective
EX 5109	Information Retrieval	1	Elective
EX 5111	Gender and Development	2	Elective
EX 5112	Social Psychology	2	Elective
EC 5153	Resource Planning and Management	2	Elective
ST 5102	Basic Statistics	2	Prerequisite
Second Semester			
EX 5202	ICT for Development	2	Compulsory
EX 5210	Marketing Communication	2	Compulsory
EX 5198	Directed Study *	5	Compulsory
EX 5199	Seminar	1	Compulsory
ST 6253	Statistical Methods for Behavioural Sciences	2	Compulsory
EX 5201	Developmental Journalism	2	Elective
EX 5203	Project Management	2	Elective
EX 5205	Human Resource Development	2	Elective
EX 5206	Participatory Methods for Development	2	Elective
EX 5207	Management Information Systems	2	Elective
EX 5208	Social Research Methodology **	2	Elective
EC 5203	Development Economics	2	Elective

** A Directed Study (EX 5198) has to be carried out by all the M.Sc. (Coursework) students in their second year*

*** M.Sc. (Coursework and Research), M.Phil. and Ph.D. students should take Social Research Methodology course (EX 5208). This course would serve as a pre-requisite course for M.Sc. (Coursework) students for the Directed Study Course (EX 5198).*

**** **Required Skill Development Programmes***
It is compulsory to attend the outdoor leadership and team building programme and the workshop on professional skill development organized by the BS. No credit will be given for these workshops.

Short Course on ICT Stewardship for Agricultural Extension

Students participating in Field Visits

Master of Organizational Management

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Candidates possessing a Bachelor's degree in Management/Social Science/Agriculture or any equivalent qualification from a recognized institute of higher education acceptable to the Senate of the University of Peradeniya.

Overview

This course has been designed to provide the theoretical foundation and to develop the competencies to become effective managers. The programme will strengthen leadership skills, management capabilities, interpersonal competencies and a positive outlook. Further, it will benefit both fresh graduates as well as those with relevant field experience

Key features

The Master Degree Programme in Organizational Management provides students insight in theory and practices of organizational management through broad exposure to the problems of organizational and human resource management. This programme has been designed to provide leadership development for desired change, to understand systematic and strategic trends affecting the organization, to be knowledgeable in cutting edge methods of management and change. It addresses underlying causal factors, redesigning of organizational structures and work processes, problem solving, conflict management and enhancing team work while mediating conflicting interests to develop a broad consensus for action.

The course modules cover contents such as strategic human resource management, organizational culture and behavior, power politics, organizational development and change, human resource development, corporate relations, employee disciplinary procedure, basic labour and industrial laws, leadership development, corporate shared value, managerial ethics, project management, marketing communication, branding and advertising. The Master in Organizational Management is in par with any postgraduate Management degree offered by recognized institutions around the world.

Code	*Title*	*Credits*	*Option*
First Semester			
EX 5102	Principles of Organizational Management	2	Compulsory / Foundation
EX 5107	Organizational Theory and Behaviour	2	Compulsory
EX 5108	Human Resource Management	2	Compulsory
EX 5112	Social Psychology	2	Compulsory
EX 5198	Directed Study*	5	Compulsory
EX 5199	Seminar	1	Compulsory
EX 5101	Principles of Communication	2	Elective
EX 5104	Developmental Sociology	2	Elective
EX 5105	Community Development	2	Elective
EX 5109	Information Retrieval	1	Elective
EX 5111	Gender and Development	2	Elective
EX 5113	Organizational Leadership	2	Elective
EX 5114	Corporate Relations	2	Elective
EC 5153	Resource Planning and Management	2	Elective
ST 5102	Basic Statistics	2	Prerequisite
Second Semester			
EX 5203	Project Management	2	Compulsory
EX 5205	Human Resource Development	2	Compulsory
EX 5209	Organizational Development and Change	2	Compulsory
EX 5198	Directed Study*	5	Compulsory
EX 5199	Seminar	1	Compulsory
ST 6253	Statistical Methods for Behavioural Sciences	2	Compulsory
EX 5202	ICT for Development	2	Elective
EX 5206	Participatory Methods for Development	2	Elective
EX 5207	Management Information Systems	2	Elective
EX 5208	Social Research Methodology**	2	Elective
BM 5203	Marketing Management	3	Elective
EX 5210	Marketing Communication	2	Elective

** A Directed Study (EX 5198) has to be carried out by all the M.Sc. (Coursework) students in their second year*

*** M.Sc. (Coursework and Research), M.Phil. and Ph.D. students should take Social Research Methodology course (EX 5208). This course would serve as a pre-requisite course for M.Sc. (Coursework) students for the Directed Study Course (EX 5198).*

**** **Required Skill Development Programmes***
It is compulsory to attend the outdoor leadership and team building programme and the workshop on professional skill development organized by the BS. No credit will be given for these workshops.

Outdoor leadership and team building Program 2019 batch

Students participating in Dining Etiquette Workshop for Professional Skills course module

Animal Science

Programmes

Master of Animal Science

Master of Aquatic Bio-Resources Management and Aquaculture

Master of Poultry Science and Technology

Master of Dairy and Meat Product Technology

M.Sc. in Animal Science

M.Sc. in Aquatic Bio-Resources Management and Aquaculture

M.Sc. in Poultry Science and Technology

M.Sc. in Dairy and Meat Product Technology

Master of Philosophy (M.Phil.)

Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study (BS) has functioned since the inception of the PGIA producing experts to cater to the needs of the livestock/fish production, product processing and allied sectors in the country. The Board has developed various new dimensions in its academic programmes during the past few decades. As the teaching panel and the members of the BS are from the University of Peradeniya as well as various other institutions, the Board always had the opportunity to interact with different segments of the animal production sector of the country and to use this advantage to develop its activities. From the inception, the Board offered postgraduate courses in various disciplines of Animal Science. From time to time new courses were introduced considering the national importance of such courses. Presently, in addition to the Degree Programme in Animal Science, the BS offers degree programmes in Poultry Science and Technology, Dairy and Meat Product Technology and Aquatic Bio-resources Management and Aquaculture.

Recent research

- Effects of ultrasound on the emulsion stability and gel properties of buffalo (Bubalus bubalis) milk gels
- Effect of Dietary Supplementation on Productive Performances of Lactating Dairy Cows Fed with Total Mixed Rations (TMRs).
- Prevalence and Economic Impact of Contagious Pustular Dermatitis Virus Among Some Ruminants in Sri Lanka
- Species replacement of white-eyes (Passeriformes: Zosteropidae) along an altitudinal gradient
- Effect of Palmyrah leaves (Boarassus flabellifer) on ensiling characteristics, nutritive value, digestibility and intake of corn (Zea mays) or hybrid sorghum (Sorghum bicolor (L) Moench) silage
- Novel approach to improve the omega 6:omega 3 fatty acid ratio in eggs and broiler meat

Master of Animal Science

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: All applicants must possess a Bachelors degree in Agriculture, Veterinary, Natural Science or an equivalent qualification acceptable to the Senate of the University of Peradeniya.

Overview

Livestock sector plays a key role in agriculture, providing employment and income generation opportunities, helping to alleviate protein malnutrition and strengthening the economy of Sri Lanka. The dairy sub sector including cattle, buffaloes and goats, poultry sub sector including broilers, layers and miscellaneous poultry, and swine industry are some key components of the livestock sector while animal product processing industry including beef and mutton is also growing rapidly with an ever increasing demand. Since main objective of the livestock industry, comprising of a range of stakeholders from small scale farmers to large scale companies, is to maximise profit utilizing the available resources, it is a challenge to achieve the above objective while ensuring sustainability. Practical solutions to most problems in the livestock sector requires a thorough knowledge and understanding on every aspect of the industry, including production, processing and marketing. The Master of in Animal Science programme is carefully designed after a thorough investigation of the needs of livestock sector of the country and global demand with the aim of producing a graduate capable of providing in depth analysis of the problems and challenges of the livestock sector, and proposing sound and innovative solutions to the issues leading to improved overall productivity and advancement in career development.

Key features

The courses have been developed and periodically revised to provide a comprehensive coverage on all aspects of Animal Science including ruminant and non-ruminant animal production, nutrition, genetics and breeding, lactation and reproductive physiology, health and hygiene, welfare and legislation, animal biotechnology, animal product processing and aquatic resource management, wildlife, extension, scientific writing and statistics. The prerequisite courses (for those with inadequate undergraduate background in Animal Science) and introductory courses are followed by advanced courses which are in par with those offered by leading universities in the world.

The laboratory practical classes and field visits are designed to provide the much needed hands on training and exposure for students. Upon completion of the course, students will be able to performing in-depth scientific analysis of complex problems of various strata of the livestock sector and recommend innovative solutions to enhance productivity and overall development of the sector. The strong theoretical background provided by this programme creates a great platform for the students to continue towards M.Phil. and Ph.D. degree programmes offered by the Board of Study in Animal Science.

Code	*Title*	*Credits*	*Option*
First Semester			
*AS 5101	Introduction to Aquaculture and Fisheries	3	Prerequisite
*AS 5102	Comparative Anatomy and Physiology of Farm Animals	3	Prerequisite
*AS 5103	Introduction to Animal Production	2	Prerequisite
*AS 5104	Principles of Animal Nutrition	2	Prerequisite
AS 5120	Endocrinology of Farm Animals	2	Compulsory
AS 5121	Monogastric Nutrition	3	Compulsory
AS 5126	Quantitative and Molecular Genetics of Farm Animals	2	Compulsory
AS 5127	Ruminant Nutrition	3	Compulsory
AS 5198	Directed Study	5	Compulsory
AS 5199	Seminar	1	Compulsory
AS 5106	Aquaculture Based Farming Systems	2	Elective
AS 5109	Dairy Chemistry	2	Elective
AS 5114	Integrated Livestock Systems	3	Elective
AS 5115	Laboratory Techniques in Animal Nutrition	2	Elective
AS 5117	Layer and Parent Stock Management	3	Elective
AS 5119	Meat Science	2	Elective
AS 5122	Physiology of Lactation	2	Elective
AS 5124	Procuring, Processing and Marketing of Fluid Milk	2	Elective
AS 5125	Processing of Dairy Products	2	Elective
AS 5128	Reproductive Physiology of Farm Animals	3	Elective
AS 5129	Selection Index and Mixed Model Methodology	3	Elective

Note: Course list continued on next page

AS 5136	Introduction to Molecular Biology in Animal Science	3	Elective
AS 5151	Biochemical Genetics and Cytogenetics	2	Elective
AS 5152	Livestock Bio-diversity and Conservation	2	Elective
AS 5197	Proposal Formulation and Scientific Writing	2	Elective
EC 5156	Livestock Economics and Marketing	2	Elective
Second Semester			
AS 5213	Livestock Breeding	3	Compulsory
AS 5218	Non-ruminant Animal Production	3	Compulsory
AS 5220	Ruminant Livestock Production	3	Compulsory
AS 5201	Advances in Forage Production and Utilization	2	Elective
AS 5202	Animal Biotechnology	3	Elective
AS 5203	Animal-Environment Interactions	2	Elective
AS 5204	Aquatic Resources Management	2	Elective
AS 5206	Broiler Production	2	Elective
AS 5214	Livestock Health and Hygiene	2	Elective
AS 5222	Wildlife Environment	3	Elective
AS 5251	Advances in Equine Nutrition and Feeding	2	Elective
AS 5252	Animal Quarantine, Welfare and Legislation	1	Elective
AS 5253	Animal Waste Handling and Management	2	Elective
AS 5258	Animal Food Safety	2	Elective
AS 5263	Global Warming and Animal Production	2	Elective
AS 5264	Cell Biology in Animal Science	2	Elective
AS 5297	Field Visits - Animal Science	1	Elective
*ST 5254	Animal Experimentation	2	Elective
EX 5214	Extension for Livestock Production	2	Elective

** Students holding degrees other than Bachelors Degree in Agriculture or Veterinary Science will be required to take courses AS 5101, AS 5102, AS 5103, AS 5104 and ST 5254. Students holding Bachelors Degree in Veterinary Science may be required to take course AS 5101 as decided by the Board of Study. No credits will be given for following prerequisite courses, but the grades should reach a minimum of a 'C' grade. Any other relevant required courses or exemptions shall be decided by the Board of Study depending on individual cases and on the recommendation of the programme coordinator/ advisor.*

Master of Poultry Science and Technology

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: All applicants must possess a Bachelors degree in Agriculture, Veterinary, Natural Science or an equivalent qualification acceptable to the Senate of the University of Peradeniya. Students holding degrees other than Bachelors degree in Agriculture or Veterinary Science may be required to follow prerequisite courses, on the basis of their qualifications as decided by the Board of Study.

Overview

While livestock is a major component of Agriculture, the poultry industry is the most developed and fastest growing component of the livestock sector in Sri Lanka. With the involvement of the private sector, importation of genetically superior commercial strains, establishment of large scale hatcheries producing high quality day old chicks for farmers, establishment of buy-back systems, improved feeding and management standards, and well developed processing and marketing systems have enabled the poultry sector to develop from backyard poultry keeping to high producing intensive broiler and layer industries. With the expansion of the poultry sector, the demand for knowledge and expertise has been on the rise for all aspects of the industry including improved feeding, health and other management standards, processing and product development, and marketing.

Employment opportunities in poultry related industries such as poultry feed, pharmaceutical and processing industries have also grown along with the expansion of the sector. The other issues related to input and output, such as price fluctuations, animal welfare, consumer protection and Government policy have also become critical to the growth of the poultry industry.

The need assessment surveys have shown that the industry requires highly specialized graduates who are capable of solving issues that requires in-depth knowledge on the subject.

The Master of Poultry Science and Technology programme is designed with the aim of producing a specialized graduate, equipped with the necessary in-depth knowledge and skills, and capable of analysing the complex problems of the poultry sector to produce creative and practically sound solutions and develop innovative procedures to improve overall productivity of the industry and economic growth of the country while enhancing opportunities for career development.

Key features

The courses of the Master of Poultry Science and Technology have been carefully developed to provide a comprehensive coverage on all aspects of Poultry Science and Technology necessary for a graduate to contribute effectively towards the advancement of the poultry sector and to provide a platform for further studies towards M.Phil. and Ph.D. degrees in Poultry Science or a related field.

Thus it covers the management aspects such as hatchery, layer and parent stock and broiler management, poultry nutrition, genetics and breeding, health and hygiene, poultry processing technology, microbiology, biotechnology, by product technology, welfare and legislation, waste management, laboratory techniques, scientific writing, statistics and several other optional courses. Laboratory practicals have been designed to develop hands on skills on all necessary laboratory procedures and fields visits provide the necessary exposure to management and issues in various large scale poultry operations and processing plants.

Code	Title	Credits	Option
First Semester			
*AS 5102	Comparative Anatomy and Physiology of Farm Animals	3	Prerequisite
*AS 5103	Introduction to Animal Production	2	Prerequisite
*AS 5104	Principles of Animal Nutrition	2	Prerequisite
AS 5108	Avian Reproduction, Embryology and Hatchery Management	2	Compulsory
AS 5117	Layer and Parent Stock Management	3	Compulsory
AS 5121	Monogastric Nutrition	3	Compulsory
AS 5134	Poultry Meat Processing Technology	1	Compulsory
AS 5135	Egg Technology	1	Compulsory
AS 5198	Directed Study	5	Compulsory
AS 5199	Seminar	1	Compulsory
AS 5115	Laboratory Techniques in Animal Nutrition	2	Elective
AS 5126	Quantitative and Molecular Genetics of Farm Animals	2	Elective
AS 5129	Selection Index and Mixed Model Methodology	3	Elective
AS 5131	Slaughterhouse Planning and Management	2	Elective
AS 5151	Biochemical Genetics and Cytogenetics	2	Elective
AS 5152	Livestock Bio-diversity and Conservation	2	Elective
AS 5197	Proposal Formulation and Scientific Writing	2	Elective
Second Semester			
AS 5205	Avian Health and Hygiene	2	Compulsory
AS 5206	Broiler Production	2	Compulsory
AS 5212	Genetics and Breeding of Poultry	2	Compulsory
AS 5298	Industrial Visits - Poultry Science and Technology	1	Compulsory
AS 5202	Animal Biotechnology	3	Elective
AS 5217	Microbiology of Dairy, Meat, Fish and Egg Products	3	Elective
AS 5252	Animal Quarantine, Welfare and Legislation	1	Elective
AS 5253	Animal Waste Handling and Management	2	Elective
AS 5256	Slaughterhouse By-Product Technology	2	Elective
AS 5264	Cell Biology in Animal Science	2	Elective
*ST 5254	Animal Experimentation	2	Elective

** Students holding degrees other than Bachelors Degree in Agriculture and Veterinary Science will be required to take courses AS 5102, AS 5103, AS 5104 and ST 5254. No credits will be given for those prerequisite courses, but the grades should reach a minimum of a 'C' grade. Any other relevant required courses or exemptions shall be decided by the Board of Study depending on individual cases on the recommendation of the programme coordinator/ advisor.*

Master of Aquatic Bio-Resources Management and Aquaculture

No. of Credits: 30
Minimum Programme Duration: 3 Semesters

Entry Requirements: All applicants must possess a Bachelors degree in Agriculture, Veterinary, Natural Science or an equivalent qualification acceptable to the Senate of the University of Peradeniya. Students holding degrees other than Bachelors degree in Agriculture or Veterinary Science may be required to follow prerequisite courses, on the basis of their qualifications as decided by the Board of Study.

Overview

Sri Lanka is leading the world with respect to the total aquatic resource area owned by a country (per unit of land area). When both inland and marine aquatic resources are considered, there is an immense potential to develop the Fisheries Sector of Sri Lanka. At present the Fisheries Sector provides direct and indirect employment to around 650,000 people and is directly linked with the lives of approximately 50% of the population in the coastal belt. About 2.5% of the export earnings come from the Fisheries Sector. The real potential for the export industry including ornamental fish has not yet been tapped. Though there are many, aquatic resources must be managed and exploited ensuring sustainability. This is a difficult task as there are many stakeholders for aquatic resources, including fishermen, farmers, tourists, Govt. Institutions (irrigation, hydro power, etc.) and people of neighbouring villages. Thus, sustainable management of aquatic resources goes beyond the purview of fisheries resource management.

Considering the amount of aquatic resources available in the country, there is an urgent need for specialized graduates who have an in-depth understanding and knowledge on aquaculture, fisheries and aquatic resource management. Therefore, the Master of Aquatic Bio-resources Management and Aquaculture (ABRMA) programme was developed to produce specialized graduates who have the necessary knowledge, understanding and skills to recognize the complex issues pertaining to management of aquatic resources and to provide effective solutions to solve the issues, in addition to the capabilities developed to contribute to the development of the aquaculture sub sector.

Key features

The programme previously known as M.Sc. in Aquaculture was revised and expanded as Master of ABRMA in order to suit the need and the demand of the country. Thus it has the basic courses and those related to Aquatic Resource Management and Fisheries.

The basic courses include Anatomy and Physiology of Fish, Genetics and Breeding, Fish Morphometrics, Biodiversity, Statistics and Scientific Writing, etc. Fisheries related courses cover many aspects such as Fisheries Management, Fish Seed Production and Larval Rearing, Ornamental Fisheries Management, Aquaculture based Farming Systems, Fish Processing, Biotechnology, Aquatic Resources Management and, Marine Fisheries Management, etc.

The applicants have the choice to select suitable optional courses depending on their inclination towards Fisheries Management or Ornamental Fisheries.

Code	*Title*	*Credits*	*Option*
First Semester			
*AS 5101	Introduction to Aquaculture and Fisheries	3	Prerequisite
AS 5105	Anatomy and Physiology of Fish	2	Compulsory
AS 5113	Fish Systematics and Morphometrics	2	Compulsory
AS 5116	Laboratory Techniques in Fisheries and Water Quality	2	Compulsory
AS 5198	Directed Study	5	Compulsory
AS 5199	Seminar	1	Compulsory
AS 5106	Aquaculture Based Farming Systems	2	Elective
AS 5110	Health Management of Fish	2	Elective
AS 5118	Mariculture	2	Elective
AS 5126	Quantitative and Molecular Genetics of Farm Animals	2	Elective
AS 5129	Selection Index and Mixed Model Methodology	3	Elective
AS 5130	Shrimp Production	3	Elective
AS 5132	Aquatic Microbiology	1	Elective
AS 5133	Fish Biotechnology	1	Elective
AS 5151	Biochemical Genetics and Cytogenetics	2	Elective
AS 5155	Fisheries Management	3	Elective
AS 5197	Proposal Formulation and Scientific Writing	2	Elective

Note: Course list continued on next page

Second Semester			
AS 5204	Aquatic Resources Management	2	Compulsory
AS 5210	Fish Population Dynamics	2	Compulsory
AS 5211	Genetics and Breeding of Fish	2	Compulsory
AS 5257	Fish Seed Production and Larval Rearing	3	Compulsory
AS 5209	Fish Feeds and Nutrition	3	Elective
AS 5215	Marine Fisheries Management	2	Elective
AS 5217	Microbiology of Dairy, Meat, Fish and Egg Products	2	Elective
AS 5219	Ornamental Fisheries Management	3	Elective
AS 5221	Shrimp and Fish Processing	2	Elective
AS 5252	Animal Quarantine, Welfare and Legislation	1	Elective
AS 5253	Animal Waste Handling and Management	2	Elective
AS 5255	Fish Farm Designing, Construction and Management	2	Elective
AS 5261	Coast Conservation and Management	1	Elective
AS 5262	Marine Environment Pollution Prevention	1	Elective
*ST 5254	Animal Experimentation	2	Elective

** Students holding degrees other than Bachelors Degree in Agriculture, and Veterinary Science will be required to take courses AS 5101 and ST 5254. Students holding Bachelors Degree in Veterinary Science may be required to take AS 5101 course as decided by the Board of Study. No credits will be given for following AS 5101, but the grade obtained should be a minimum of a 'C' grade. Any other relevant required courses shall be decided by the Board of Study depending on individual cases and on the recommendation of the programme coordinator/advisor.*

Master of Dairy and Meat Product Technology

Overview

No. of Credits: 30
Minimum Programme Duration: 3 Semesters

Entry Requirements: All applicants must possess a Bachelors degree in Agriculture, Veterinary, Natural Science or an equivalent qualification acceptable to the Senate of the University of Peradeniya. Students holding degrees other than Bachelors degree in Agriculture or Veterinary Science may be required to follow prerequisite courses, on the basis of their qualifications as decided by the Board of Study.

With the recent developments in the livestock sector, particularly in the poultry industry, animal product processing has evolved with several large scale companies pioneering the development. As life styles of modern Sri Lankans become increasingly hectic, the demand for fast foods and easy-to-cook preparations have been increasing. The market has been driven to capture specific age groups of consumers, particularly school children.

Thus many attractive animal products have been introduced especially for children in the recent past. Since public safety and health issues are becoming increasingly important, the processing industry needs to adapt to the new life styles of consumers such as with low fat milk, less cholestrogenic foods, and functional foods. Meanwhile, value addition seems to be the main alternative in livestock industry where farm gate price of milk, meat, eggs and other products are relatively low to be economically sustainable.

Food hygiene is also a major concern from slaughterhouses to processing plants and retail outlets. Since improved technologies and new products are being introduced continuously to the ever changing market needs, it is essential to have specialized knowledge, training and hands-on skills on all aspects of processing technology.

Thus the programme of the Master of Dairy and Meat Technology was developed as a focused specialization programme which provides much needed exper-tise and capabilities to handle advanced operations and laboratory testing and monitoring procedures in the animal product processing industry, to

understand the issues related to the processing industry, to be capable of development of new products and to advance the career opportunities in the field of animal product processing or a related field.

Key features

The Master of Dairy and Meat Product Technology programme has three major components including dairy product technology, meat product technology, and general courses such as animal bio-technology, animal welfare and legisla-tion, food and nutrition, microbiology, genetics, and physiology. In addition to processing, various other aspects such as marketing, slaughterhouse preparation, public safety, food analysis, slaughter-house by-product technology, environ-mental impact assessment are available as optional courses to be followed de-pending on the choice of the student.

The laboratory classes provide the hands-on experience in animal product processing. Field visits provide the student much needed exposure to the leading processing plants and slaughterhouses of the country.

Code	Title	Credits	Option
First Semester			
*AS 5102	Comparative Anatomy and Physiology of Farm Animals	3	Prerequisite
*AS 5103	Introduction to Animal Production	2	Prerequisite
AS 5109	Dairy Chemistry	2	Compulsory
AS 5119	Meat Science	2	Compulsory
AS 5124	Procuring, Processing and Marketing of Fluid Milk	2	Compulsory
AS 5125	Processing of Dairy Products	2	Compulsory
AS 5134	Poultry Meat Processing Technology	1	Compulsory
AS 5198	Directed Study	5	Compulsory
AS 5199	Seminar	1	Compulsory
AS 5115	Laboratory Techniques in Animal Nutrition	2	Elective
AS 5120	Endocrinology of Farm Animals	2	Elective
AS 5122	Physiology of Lactation	2	Elective
AS 5126	Quantitative and Molecular Genetics of Farm Animals	2	Elective
AS 5127	Ruminant Nutrition	3	Elective
AS 5129	Selection Index and Mixed Model Methodology	3	Elective
AS 5131	Slaughterhouse Planning and Management	2	Elective
AS 5151	Biochemical Genetics and Cytogenetics	2	Elective
AS 5197	Proposal Formulation and Scientific Writing	2	Elective
AE 5152	Environmental Impact Assessment	2	Elective
FT 5105	Food Microbiology	2	Elective
FT 5114	Nutritional and Health Aspects of Food	2	Elective
FT 5156	Food Regulations and Quality Management Systems	2	Elective
Second Semester			
AS 5207	Dairy Engineering	2	Compulsory
AS 5216	Meat Processing Technology	2	Compulsory
AS 5217	Microbiology of Dairy, Meat, Fish and Egg Products	3	Compulsory
AS 5256	Slaughter House By-Product Technology	2	Compulsory
AS 5299	Industrial Visits-Dairy and Meat Product Technology	1	Compulsory
AS 5201	Advances in Forage Production and Utilization	2	Elective
AS 5202	Animal Biotechnology	3	Elective
AS 5213	Livestock Breeding	3	Elective
AS 5218	Non–Ruminant Animal Production	3	Elective
AS 5220	Ruminant Livestock Production	3	Elective
AS 5221	Shrimp and Fish Processing	2	Elective
AS 5252	Animal Quarantine, Welfare and Legislation	1	Elective
AS 5258	Animal Food Safety	2	Elective
AS 5259	Dairy Biotechnology	2	Elective
AS 5260	Dairy Sanitation and Hygiene	1	Elective
FT 5201	Food Plant Layout and Operations	1	Elective
FT 5203	Production and Marketing Operations in Food Manufacturing Organizations	2	Elective
FT 5223	Food Analysis	3	Elective
FT 5224	Sensory Evaluation of Foods	1	Elective
*ST 5254	Animal Experimentation	3	Elective

** Students holding degrees other than Bachelors Degree in Agriculture and Veterinary Science will be required to follow courses AS 5102, AS 5103 and ST 5254. No credits will be given for following prerequisite courses, but the grades should be a minimum of a 'C' grade. Any other relevant required courses shall be decided by the Board of Study depending on individual cases and on the recommendation of the programme coordinator/advisor.*

Business Administration

Programmes

Master of Business Administration (MBA)

Doctor of Business Administration (DBA)

Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study was established to cater to the demand for high calibre management professionals, academics and researchers. The Board of Study offers three-degree programmes MBA, DBA and PhD. The MBA programme aims to provide students with a sound theoretical base on business and management in order to prepare them to hold general management responsibilities. The DBA programme focuses on training professionals who are looking for new intellectual challenges posed by practical research problems to sharpen their applied research skills needed for creating value for their organizations whereas the PhD programme focuses mainly on training academics and researchers in the fields of Business and Management to sharpen their research skills while contributing to the advancement of the management theory.

Selected Research Articles

• Kumar, S., Rauf, F. H. A. (2019 online) Working to help or helping to work? Work-overload and allocentrism as predictors of organizational citizenship behaviours. *International Journal of Human Resource Management*.

• Rauf, F. H. A. & Kumar, S. (2019). Seeing the forest, beyond the trees: Dimensionality of context specific organizational citizenship behaviour in a Sri Lankan context. *Sri Lanka Journal of Social Science*, 42(1), 65-76.

• Hapuhinne, H. K. D. W. M. S. K. H. & Kumar, S. (2019). The Impact of Physical Work Environment on Job Satisfaction: The Perceptions of the Clerical Staff at the University of Kelaniya. 5th National Research Conference on Applied Social Statistics. Kelaniya: University of Kelaniya

Master of Business Administration -MBA

No. of Credits:
MBA By Coursework only (SLQF Level 9: Coursework 36 Credits + 5 Credit Independent Project)
MBA by Coursework & Research (SLQF Level 10: Coursework 36 Credits + One Year Research)
Minimum Programme Duration: 4 semesters for SLQF Level 9, and 5 semesters for SLQF Level 10
Entry Requirements: Applicants must possess a degree from a recognized university or professional qualifications equivalent to a degree which is acceptable to the Senate of the University of Peradeniya. Preference will be given to applicants with appropriate managerial experience.

Overview

The Peradeniya MBA Programme commenced in 1998 through the British Council Higher Education link programme with the support of the University of Stirling, U.K This is the 3rd MBA programme offered by a state university in the country and the first outside Colombo. This programme is classified by independent reviewers as one of the top MBA programmes in Sri Lanka. The objective of the MBA programme is to provide a sound management theoretical base for professionals who are preparing themselves to hold general management responsibilities. Our MBA programme exposes students to a broad range of management theories, tools and techniques to develop and sharpen their management skills. The programme delivers a complete package including the best environment for students to achieve life-long learning skills, to establish long-lasting networks, fulfil their personal/leadership potential and progress in their respective career paths.

Key features

The MBA programme is anchored to the fundamentals of general management including the latest theories and the best practices in the current business arena. It is inspired by the University's tradition of tutorial discussions and lively debates. The programme adopts a variety of teaching and interactive learning methodologies such as lectures, workshops, seminars, syndicate group activities and individual projects. One of the key features of the programme is the opportunity for students to complete the degree at two levels of Sri Lanka Qualification Framework (SLQF), i.e., MBA by Coursework only (Level 9) and MBA by Coursework and Research (Level 10). Upon completing 36 coursework credits, the students who wish to exit the programme at the SLQF Level 9 should carry out a 5 credit independent project whereas students who aspire to develop their research skills should carry out one year-long research that involves an in-depth exploration of a topic of interest to them and exit the programme at SLQF Level 10. This feature makes the Peradeniya MBA a unique programme in management education in Sri Lanka.

Code	*Title*	*Credits*	*Option*
First Semester			
BM 5101	Organizational Behaviour and Analysis	3	Compulsory
BM 5102	Strategic Human Resource Management	2	Compulsory
BM 5103	Accounting	2	Compulsory
BM 5104	Business Statistics	2	Compulsory
BM 5105	Business Law	2	Compulsory
BM 5106	Business Economics	2	Compulsory
BM 5107	Quantitative Management Techniques	2	Compulsory
BM 5108	Management Information Systems	2	Compulsory
BM 5198	Project	5	Compulsory*
BM 5109	Agribusiness Management	2	Elective
BM 5110	Organizational Diagnoses and Change	2	Elective
BM 5111	Project Management	2	Elective
BM 5112	e-Business Strategy	2	Elective
BM 5113	Business Development Seminar	2	Elective
BM 5114	Real Estate Investment and Development	2	Elective
BM 5115	Supply Chain and Logistics Management	3	Elective
Second Semester			
BM 5201	Corporate Finance	2	Compulsory
BM 5202	Managerial Economics	2	Compulsory
BM 5203	Marketing Management	3	Compulsory
BM 5204	Strategic Management	2	Compulsory
BM 5205	Entrepreneurship	2	Compulsory
BM 5206	International Business	2	Compulsory
BM 5207	Research Methods for Managers	2	Compulsory
BM 5208	Principles of Management	2	Elective
BM 5209	Enterprise Planning and Operations Management	2	Elective
BM 5210	International Corporate Finance	2	Elective
BM 5211	International Marketing	2	Elective
BM 5212	Consumer Behaviour	2	Elective
BM 5213	Quality Management Systems	2	Elective
BM 5214	GIS for Business and Management	2	Elective
BM 5215	Planning an Entrepreneurial Venture	2	Elective

* *Compulsory only for students who are pursuing MBA by Coursework only*

Doctor of Business Administration - DBA

Minimum Programme Duration: 6 Semesters

Entry Requirements: Applicants must possess an MBA or a Masters degree in Management/ Business studies obtaining a minimum GPA of 3.5 or equivalent and appropriate managerial and research experience. Applicants should successfully defend their proposal to be selected. The interview committee will examine the academic strengths and weaknesses of students admitted to the programme and will advise them on the courses that they should follow to successfully complete the programme

The DBA Programme has been designed for senior management professionals who have the need to develop advanced research skills, and are looking for new intellectual challenges. The programme requires the students to apply management theories to solve research problems of practical relevance in their chosen industries, and organizational contexts by carrying out in-depth research. This programme also provides students with a platform to create new knowledge in their chosen fields of study. It will also prepare them to be professionals with an academic outlook who could contribute to the society as industry leaders, policymakers, academics and business consultants.


உயர்ப்பட்டங்களுக்கான
கலவி நிறுவகம்

Doctor of Philosophy - Ph.D.

Minimum Programme Duration: 6 Semesters

Entry Requirements: Applicants must possess an MBA or a Masters degree in Management/ Business studies obtaining a minimum GPA of 3.5 or equivalent and appropriate managerial and academic experience with a sound publication record. Applicants should successfully defend their proposal to be selected. The interview committee will examine the academic strengths and weaknesses of students admitted to the programme and will advise them on the courses that they should follow to successfully complete the programme.

Overview

The PhD programme has been designed for postgraduate students who are seeking academic and research careers in the fields of business and management. It will enable students to acquire in-depth knowledge in the fields of business and management and to develop advanced research skills. Theprogramme requires students to contribute to the advancement of the theory in their chosen areas of research. This programme provides a platform to students with great ideas to become leading researchers, teachers and scholars of the next generation in their fields.

Key features

Both DBA and PhD programmes offer distinctive and stimulating intellectual environments and culture that fully supports the research endeavours of our faculty and students, which are unique features of the PGIA, University of Peradeniya. These programmes offer the opportunity for students to engage with faculty members on significant research problems of interest to both academic and business communities while interacting extensively with high calibre peers.

List of courses

The interview committee will examine the academic strengths and weaknesses of admitted students and may inform courses they should complete to supplement their research.

Bio-Statistics

Programmes

- Master of Applied Statistics
- Master of Bio-Statistics
- M.Sc. in Applied Statistics
- M.Sc. in Bio-Statistics
- Postgraduate Diploma in Applied Statistics
- Master of Philosophy (M.Phil.)
- Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study (BS) was established in 1997 with a vision to achieve excellence in postgraduate teaching and research in Applied statistics and Biostatistics. The Board educates its postgraduate students to undertake independent research in the areas of applied statistics and biostatistics to promote the correct use of statistics in education, decision making and policy matters, which will eventually lead to the sustainable development of the country. Most students of various disciplines follow certain courses of this Board to gain knowledge in statistics which is an essential component for research scholars. With the establishment of the BS a landmark has been reached in the development and use of statistics in the country, which has been a long felt need. The BS offers degrees relevant to the local context. Many students are from the medical profession as it opens application of statistics in Medicine too. To disseminate the knowledge, the BS offers many short courses on the application of Statistics for various sectors of the government, non-government and private sector organizations.

Recent Research

- Statistical methodology for classification
- Modeling world market prices
- Construction of composite indices
- Multivariate categorical data analysis techniques for detecting disagreement
- Modelling trends in climate variables
- Modelling disease epidemics
- Survival analysis techniques for disease control monitoring programs

Master of Applied Statistics
Master of Bio-Statistics

No. of Credits: 30
Minimum Programme Duration: 2 semesters

Entry Requirements: Bachelors Degree or equivalent acceptable to the Senate of the University of Peradeniya.

Overview

The Master of Applied Statistics and Bio-Statistics at the PGIA welcomes student from a broad range of disciplines to follow intensive degrees strengthening their theoretical and applied statistical knowledge and skills. The courses are taught by a well experienced and highly qualified teaching panel.

Key features

Statistics is required in all the disciplines and professions. Therefore, the Masters courses are designed to provide a comprehensive and in depth coverage in abroad range of subjects with a wide range of compulsory and optional subjects to cater to the interests of applicants to acquire sufficient skills to tackle the challenges of modern statistics.

List of Courses - M.Sc. in Applied Statistics

Code	*Title*	*Credits*	*Option*
First Semester			
ST 5101	Calculus and Matrix Algebra	2	Prerequisite
ST 5102	Basic Statistics	2	Prerequisite
ST 5103	Data Analysis Using Statistical Software	3	Compulsory
ST 5104	Sampling Techniques	2	Compulsory
ST 5105	Time Series Analysis	2	Compulsory
ST 5151	Statistical Theory	4	Compulsory
ST 5155	Design and Analysis of Experiments	2	Compulsory
ST 5198	Directed Study	5	Compulsory
ST 5199	Seminar	1	Elective
ST 5106	Computer Programming	2	Elective
ST 5152	Exploratory and Robust Data Analysis	2	Elective
ST 5153	Modelling Binary Data	2	Elective
ST 5154	Statistical Genetics	2	Elective
ST 6101	Vector Analysis	2	Elective
ST 6102	Measure Theory	2	Elective
ST 6103	Group Theory	2	Elective
ST 6104	Graph Theory	3	Elective
ST 6151	Variance Components Estimation	2	Elective
Second Semester			
ST 5203	Regression Analysis	2	Compulsory
ST 5204	Nonparametric Statistics	2	Compulsory
ST 5205	Categorical Data Analysis	3	Compulsory
ST 6202	Multivariate Statistical Methods	3	Compulsory
ST 5201	Advanced Calculus	2	Elective
ST 5251	Statistical Methods for Analysis of Spatial Data	3	Elective
ST 5252	Design and Analysis of Epidemiological Studies and Clinical Trials	2	Elective
ST 5253	Crop Experimentation	1	Elective
ST 5254	Animal Experimentation	2	Elective
ST 5255	Statistical Quality Control	2	Elective
ST 6201	Linear Models	3	Elective
ST 6203	Stochastic Processes	2	Elective
ST 6251	Statistical Computing	2	Elective
ST 6253	Statistical Methods for Behavioural Sciences	2	Elective
ST 6254	Advanced Design and Analysis of Experiments	2	Elective

Please turn over for list of courses of the M.Sc. in Bio-Statistics

List of Courses - M.Sc. in Bio-Statistics

Code	Title	Credits	Option
First Semester			
ST 5101	Calculus and Matrix Algebra	2	Prerequisite
ST 5102	Basic Statistics	2	Prerequisite
ST 5103	Data Analysis Using Statistical Software	3	Compulsory
ST 5151	Statistical Theory	4	Compulsory
ST 5153	Modeling Binary Data	2	Compulsory
ST 5155	Designs and Analysis of Experiments	2	Compulsory
ST 5198	Directed Study	5	Compulsory
ST 5199	Seminar	1	Elective
ST 5104	Sampling Techniques	2	Elective
ST 5105	Time Series Analysis	2	Elective
ST 5106	Computer Programming	2	Elective
ST 5152	Exploratory and Robust Data Analysis	2	Elective
ST 5154	Statistical Genetics	2	Elective
ST 6101	Vector Analysis	2	Elective
ST 6102	Measure Theory	2	Elective
ST 6103	Group Theory	2	Elective
ST 6104	Graph Theory	3	Elective
ST 6151	Variance Components Estimation	2	Elective
Second Semester			
ST 5203	Regression Analysis	2	Compulsory
ST 5204	Nonparametric Statistics	2	Compulsory
ST 5205	Categorical Data Analysis	2	Compulsory
ST 5252	Design and Analysis of Epidemiological Studies and Clinical Trials	2	Compulsory
ST 5201	Advanced Calculus	2	Elective
ST 5251	Statistical Methods for Analysis of Spatial Data	3	Elective
ST 5253	Crop Experimentation	1	Elective
ST 5254	Animal Experimentation	2	Elective
ST 5255	Statistical Quality Control	2	Elective
ST 6201	Linear Models	3	Elective
ST 6202	Multivariate Statistical Methods	3	Elective
ST 6203	Stochastic Processes	2	Elective
ST 6251	Statistical Computing	2	Elective
ST 6253	Statistical Methods for Behavioural Sciences	2	Elective
ST 6254	Advanced Design and Analysis of Experiments	2	Elective

Postgraduate Diploma in Applied Statistics

No. of Credits: 25
Minimum Programme Duration: 2 semesters

Entry Requirements: Bachelors Degree or equivalent
acceptable to the Senate of the University of Peradeniya.

Overview

Board of Study in Bio-Statistics at the PGIA offers the Postgraduate Diploma in Statistics each year for graduates of various disciplines. This has created an excellent opportunity for professionals, recent graduates and managers to grasp both theoretical and practical aspects of a wide range of statistical applications within a very short time (minimum of nine months).

Key features

The course provides an introduction to the statistical concepts and methods relevant to data gathering and analyses in a wide variety of research areas including biological and social sciences, and the lessons are conducted using real world examples. Upon successful completion of the course students will be able to apply the statistical concepts and methods to which they have been introduced.

Code	*Title*	*Credits*	*Option*
First Semester			
PGD 5101	Basic Mathematics	2	Prerequisite
PGD 5102	Basic Statistics	2	Prerequisite
PGD 5103	Experimental Techniques	2	Compulsory
PGD 5104	Regression Analysis	2	Compulsory
PGD 5105	Sampling Techniques	2	Compulsory
PGD 5106	Use of Statistical Software	2	Compulsory
Second Semester			
PGD 5201	Categorical Data Analysis	2	Compulsory
PGD 5202	Non Parametric Statistics	2	Compulsory
PGD 5203	Multivariate Data Analysis	2	Compulsory
PGD 5204	Binary Data Analysis	2	Compulsory
PGD 5208	Seminar/Independent Study	2	Compulsory
PGD 5205	Studies in Medical Research Investigations	2	Elective
PGD 5206	Statistical Applications in Business	2	Elective
PGD 5207	Special Topics	1	Elective

Students at a Survey Design short course. A number of short courses are offered by the Board of Study each year.

There is a magic in graphs. The profile of a curve reveals in a flash a whole situation — The life history of an epidemic, a panic, or an era of prosperity. The curve informs the mind, awakens the imagination, convinces.

Henry D. Hubbard

Crop Science

Programmes

Master of Crop Science
Master of Floriculture & Landscape Architecture
Master of Environmental Forestry
Master of Tropical Agriculture
Master of Plantation Crop Management
Master of Horticulture
M.Sc. in Crop Science
M.Sc. in Floriculture & Landscape Architecture
M.Sc. in Environmental Forestry
M.Sc. in Tropical Agriculture
M.Sc. in Plantation Crop Management
M.Sc. in Horticulture
Master of Philosophy (M.Phil.)
Doctor of Philosophy (Ph.D.)

About the Board of Study

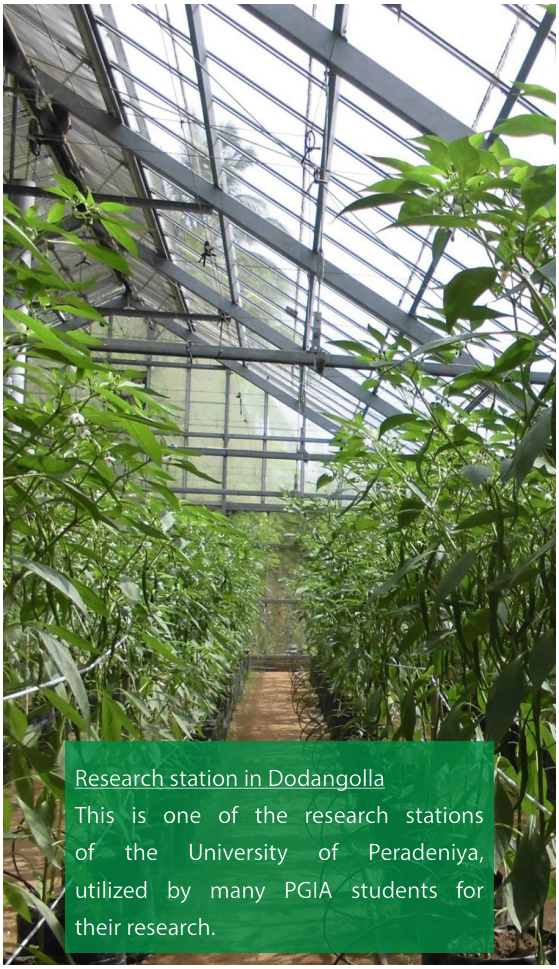
The Board of Study (BS) in Crop Science was established with the formation of the PGIA in 1975. The BS maintained a steady intake of students for the degrees of M.Sc., M.Phil. and Ph.D. throughout the last few decades. The research work carried out in fulfilment of its research degrees has made a significant contribution towards improving crop productivity in the country. At present the Board offers courses in a diverse range of areas within the purview of Crop Science.

The degree programme in Crop Science offered is focused on the integrated crop production technologies with a view to upgrade the scientific and practical knowledge base of agricultural scientists and thus enhance the productivity of the cultivated lands of Sri Lanka. Development of forestry and agroforestry related solutions are powerful ways to address environmental problems in Sri Lanka and it requires training personnel on broad subject areas of forestry, agroforestry and environment. Based on the current needs and demands in the country the BS designed a Master degree programme in Environmental Forestry.

Sri Lanka has ideal climatic zones for production of flowers and foliage plants. The Floriculture industry in Sri Lanka has shown a steady growth during the recent past. The landscape and floriculture industry go hand in hand as both need plants. With the wide range of plant species available in the country, both industries will provide opportunities to earn foreign exchange and beautify the country. The demand for landscaping is now significant and increasing. As the Institute has always focused on areas of national importance, the BS introduced the M.Sc. in Floriculture and Landscape Architecture to cater to this demand. The Master degree programme in Tropical Agriculture provides multidisciplinary, production-oriented training in tropical agriculture to participants to be professionally active in the agricultural sector in the tropics. The BS has also proposed new degree programmes to cater the national demand.

Recent research

- Identification of habitats and reproduction of *Cyathea sinuata, Cyathea hookeri* and their possible hybrid and their characterization in Kanneliya and Sinharaja MAB reserves for their conservation (introduced two new endemic plant species to the science in 2010)
- Development of cost effective micropropagation technique for rapid multiplication of hybrid Tea (Introduced low cost micropropagation technique for rapid multiplication of tea hybrids)
- Effect of Rice straw mulching on agronomic traits and weed control of direct seeded lowland rice (*0ryza sativa* L) (introduced integrated nutrient and weed management system for low land rice in Anuradhapura district)
- Identification of candidate genes for salt tolerance in the Sri Lankan rice variety AT 354 based on gene expression profiles
- Improvement of plant nutrient supply of greenhouse Tomato for enhanced growth and yield under dry climates
- Induction of poinsettia (*Euphorbia pulcherrima Willd. ex Klotzsch*) blooming during off season to use as marketable pot plant for indoor decorations
- Screening of rice varieties for salt tolerance: influence of whole and subsoil salinity on crop performances and agronomic mitigation measures
- Variability of the antioxidant activity of fruits from Dry Zone home gardens
- Variation of growth, physiological and biochemical parameters of two contrasting coconut genotypes in Different agro-ecological regions and land suitability classes of Sri Lanka and their relationship to drought tolerance



Research station in Dodangolla

This is one of the research stations of the University of Peradeniya, utilized by many PGIA students for their research.

Master of in Crop Science

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Applicants should possess a Bachelor's degree in Agriculture, Plant Sciences or equivalent qualifications acceptable to the Senate of the University of Peradeniya. Students holding non-agricultural degrees are required to follow prerequisite courses (CS 5101 and one of the courses from CS 5129, CS 5130 or CS 5131) in consultation with the programme coordinator.

Overview

Producing sufficient food to feed an increasing human population using a decreasing and a more expensive resource base in terms of land, nutrients and water in the face of environmental threats such as climate change is the greatest challenge faced by humankind in the 21st Century. Producing trained personnel in Crop Science, the science and practice of growing agricultural crops to maximize food production, is essential to meet the challenge of ensuring food security at both national and global levels. Accordingly, the Master degree programme in Crop Science provides a broad and comprehensive coverage of all aspects of Crop Science.

The degree offers an impressive array of courses on the principles and practices of modern crop production technologies aimed towards increasing the productivity and profitability of a wide range of agricultural and horticultural crops. Due to its broad-based course package, Master of (Crop Science) graduates are able to enter a diverse range of career paths such as research and development, farm and enterprise management, policy for-mulation, rural development and self-employment through entrepreneurship. Past graduates have built successful careers both within and outside Sri Lanka in government institutions including universities, private sector companies and non-governmental organizations.

Key features

The Master degree in Crop Science is open to a wide range of graduates with Bach-elor's qualification in Agriculture, Bio-logical Sciences and Applied Sciences. Course package of the degree programme includes courses in the following broad disciplines of Crop Science: Agronomy of field and plantation crops, Horticulture, Crop Physiology, Plant-Water Relationships, Management of Plant Nutrition, Seed Physiology, Weed Biology and Management, Commercial Nursery Management and Fruit and Vegetable Crop Production.

Courses on advanced crop production technologies such as Protected Culture, Tissue Culture and Postharvest Physiology of Horticultural Produce and a course on Climate Change and its impacts on crop production are particular features of the course package. All courses contain up-to-date curricula and are taught by a faculty of highly-qualified Professors and Senior Lecturers from the University of Peradeniya, qualified and experienced officers from the National Agricultural Research System and experienced managers from the private sector.

As part of the broad-based nature of the degree programme, a considerable range of courses related to Forestry, Agroforestry and Natural Resource Management are also included in the course package as elective courses so that interested candidates can obtain a broader knowledge in these disciplines.

Code	*Title*	*Credits*	*Option*
First Semester			
CS 5101*	Principles of Crop Production	3	Prerequisite
CS 5102	Plant Water Relationships I	2	Compulsory
CS 5103	Weed Biology	2	Compulsory
CS 5104	Advanced Horticulture	2	Compulsory
CS 5105	Crop Physiology	3	Compulsory
CS 5131**	Tropical Field Crop Production	3	Compulsory
CS 5106	Seed Physiology and Technology	2	Elective
CS 5107	Protected Culture	2	Elective
CS 5108	Fruit Crop Management	2	Elective
CS 5109	Olericulture (Vegetable Crop Culture)	2	Elective
CS 5110	Forest Ecology	2	Elective
CS 5111	Agroforestry	2	Elective
CS 5112	Plantation Forestry and Environment	2	Elective
CS 5120	Commercial Nursery Management	2	Elective
SS 5151	Management of Soil Organic Matter	2	Elective
ST 5155	Design and Analysis of Experiments	2	Elective
CS 5145	Turf grass Management	1	Elective
Second Semester			
CS 5202	Weed Control	2	Compulsory
CS 5203	Climate Change and Crop Production	3	Compulsory
CS 5204	Crop Management Techniques	3	Compulsory
CS 5298	Directed Study	5	Compulsory
CS 5201	Crop Ecology	2	Elective

Note: Course list continued on next page

CS 5206	Postharvest Physiology and Management of Horticultural Produce	2	Elective
CS 5207	Physiology of Cereal Production	2	Elective
CS 5208	Organic Crop Production	2	Elective
CS 5209	Plant Water Relationships II	2	Elective
CS 5210	Plant Functional Traits	1	Elective
CS 5211	Tree Crop Physiology	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective
CS 5231	Crop Simulation Modelling	2	Elective
ST 5253	Crop and Animal Experimentation	1	Elective
SS 5201	Soil Fertility and Fertilizers	3	Elective

** Prerequisite for non-agricultural graduates*
*** Compulsory for non agriculture graduates*

Master of Floriculture and Landscape Architecture

No. of Credits: 30
Minimum Programme Duration: 3 semesters
Entry Requirements: Applicants should possess a Bachelor's degree in Agriculture, Plant Sciences or equivalent qualifications acceptable to the Senate of the University of Peradeniya. Students holding non-agricultural degrees are required to follow prerequisite courses in consultation with the programme coordinator.

Overview

The Master of Floriculture and Landscape Architecture is designed for students seeking research and professional careers in design, implementation and management of landscaping projects for commercial enterprises and home gardens. The course is structured to support students to develop technical, design, planning, scientific and manage-ment skills in floriculture and landscape architecture to take part in the industry that will continue to expand into the future.

Key features

The programme offers courses in the topics of commercial floriculture, nursery management, landscape horticulture, landscape architecture, landscape designs, indoor gardening for interior decoration, plant breeding and biotechnology, plant pathology and additional subjects providing up to date knowledge of floriculture, landscape architecture and interdisciplinary aspects of natural sciences.

The programme consists of lectures, field visits, laboratory and farm practices. Compulsory subjects necessary know-how required for the floriculture industry and designing of landscaping projects. The programme also offers flexibility in selecting subjects according to personal interests through elective courses.

After graduation students will be able to organize and lead the floriculture and landscape industry to carryout the tasks of managers, designers and take part in research and education.

Code	*Title*	*Credits*	*Option*
First Semester			
CS 5107	Protected Culture	2	Compulsory
CS 5119	Landscape Horticulture	3	Compulsory
CS 5120	Commercial Nursery Management	2	Compulsory
CS 5121	Landscape Architecture	2	Compulsory
CS 5104	Advanced Horticulture	2	Elective
CS 5106	Seed Physiology and Technology	2	Elective
CS 5122	Plant Growth Regulators	2	Elective
CS 5123	Plant Tissue Culture – Micropropagation	2	Elective
EC 5104	Agricultural Marketing I	2	Elective
PP 5102	Plant Pathology	2	Elective
Second Semester			
CS 5206	Post-harvest Physiology and Management of Horticultural Crops	2	Compulsory
CS 5222	Commercial Floriculture	3	Compulsory
CS 5223	Indoor Gardening for Interior Decoration	2	Compulsory
CS 5224	Landscape Designs	3	Compulsory

Note: Course list continued on next page

CS 5298	Directed Study and Seminar	5	Compulsory
CS 5202	Weed Control	2	Elective
CS 5216	Urban Forestry and Arboriculture	2	Elective
CS 5225	Advanced Plant Tissue Culture	2	Elective
AB 5203	Plant Breeding Techniques	2	Elective
SS 5201	Soil Fertility and Fertilizers	3	Elective
PP 5254	Disease Management in Floriculutral Crops	2	Elective

Tissue Culture Facilities


stomata
sunken
Ridges
Trichomes
(Absorb Water)

Master of Plantation Crop Management

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: All applicants should possess a B.Sc. degree in Agriculture, Science/Natural Science, Forestry, Management or an equivalent qualifications acceptable to the Senate of the University of Peradeniya.

Overview

The plantation sector can be considered a principal component of the Sri Lankan economy in terms of export earnings, livelihoods of people and product consumption. The sector has transformed its image into a 'technology-based industry', dealing with competitive international market trends. There are several newly emerging challenges, opportunities and critical issues in these sectors, which have opened up new dimensions. These need to be taken into account in the production and processing of plantation crops and dealt with in a timely and professional manner.

The Master of Plantation Crop Management offers a wide array of courses tailor-made for the needs of the industry in a professional manner. Due to its broad-coverage of the courses, the Master Plantation Crop Management will produce competent postgraduates who are able to face the challenges and address a diverse range of issues related to plantation crops while exploring the competitive global market opportunities more efficiently. The structured program provided by the Master of Plantation Crop Management also provides an opportunity to upgrade and update the knowledge of those who are already employed in the plantation sector with relevant and current information.

Key features

The courses in the Master of Plantation Crop Production will provide current and advanced knowledge, skills and develop appropriate attitudes in all relevant subject areas of plantation crops in Sri Lanka as follows: Production, postharvest handling; processing and product technologies; management; marketing; certification; value chain analysis; value addition and product diversification; policies and related legislations; organizational, human management.

The courses are taught by qualified and highly trained staff members including Senior Professors, Professors and Senior Lecturers of the Faculty of Agriculture, University of Peradeniya, and members of the National Research Institutes, Forest Department, and officials from the private sector.

The courses will be taught by using interactive learning methods, by the trained staff members of the Faculty of Agriculture, to make the learning experience effective and efficient. The Master programme is further strengthened by the Industrial Training component offered in the 3rd semester, which is of candi-dates choice.

Code	*Title*	*Credits*	*Option*
First Semester			
CS 5137	Agronomy of Plantation Crop Practices	2	Compulsory
CS 5112	Plantation Forestry and Environment	2	Compulsory
CS 5130*	Cultivation and Processing of Plantation Crops	3	Compulsory
CS 5138	Plantation Crop and Forestry Sector Policy and Legislation	1	Compulsory
EX 5115	Human Resource Management in the Plantation Sector	1	Compulsory
AB 5108	Principles of Plant Breeding	2	Compulsory
CS 5114	Biodiversity	2	Elective
CS 5110	Forest Ecology	2	Elective
CS 5111	Agroforestry	2	Elective
Second Semester			
CS 5238	Yield Physiology of Plantation Crops	2	Compulsory
PP 5260	Advances in Plant Protection Methods for Plantation Crops and Forest Species	1	Compulsory
CS 5239	Processing and Value Addition of Plantation Crop Products	2	Compulsory
SS 5209	Land Use Planning	2	Compulsory
CS 5240	Plantation Crop Improvement	2	Compulsory
CS 5298	Directed Study	5	Compulsory
EC 5237	Agricultural Value Chain Management	1	Elective
CS 5208	Organic Crop Production	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective
ST 5253	Crop and Animal Experimentation	3	Elective
CS 5215	Ecological Interactions of Trees and Crops	2	Elective
CS 5216	Urban Forestry and Arboriculture	2	Elective
SS 5204	Management of Tropical Uplands	1	Elective

Note: Course list continued on next page

Second Year First Semester			
CS 5139	Climate Change Adaptation, Mitigation and Carbon Trading	1	Compulsory
CS 5140	Quality Assurance in Plantation Crop Industry	1	Compulsory
CS 5141	Emerging Trends in the Plantation Industry	1	Compulsory
CS5142	Industrial Training	2	Compulsory
CS 5143	Disaster Risk Reduction Through Ecological Approaches	1	Compulsory
AE 6106	Innovative Technologies for Mechanization in Plantation Industry	1	Compulsory
EC 5107	Project Analysis	2	Elective
CS 5144	Integrated Plantation Crops-Other Crops-Animal-Fish Based Farming Systems	1	Elective
CS 5117	Economics of Environmental Forestry	2	Elective
CS 5123	Plant Tissue Culture – Micropropagation	2	Elective
CS 5104	Advanced Horticulture	2	Elective
SS 5104	Plant Nutrition	2	Elective

* Compulsory for non agriculture graduates

Master of Environmental Forestry

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: All applicants should possess a B.Sc. degree in Agriculture, Plant Science, or related Science acceptable to the Senate of the University of Peradeniya. Those with non-agricultural degrees should have at least 2 years of experience in the field of Agriculture and are required to follow prerequisite courses as prescribed by the Board of Study.

Overview

Many developed and developing countries are facing key environmental challenges such as land degradation and deforestation, loss of biodiversity, depletion of coastal resources, water pollution and waste disposal. In this context, development and applications of forestry and agroforestry related solutions are identified as powerful and proven ways to address burning environmental problems in such countries. Thus, there is a growing demand throughout the world on balancing production and conservation of existing natural vegetations. In this context, professionals with knowledge and skills of agroforestry, plantation forestry and natural forests and their applications in the processes of production, environmental conservation and changing climate are imperative.

The Environmental Forestry programme enables students to obtain postgraduate qualifications in analysis and synthesis of knowledge and skill to apply principles and practices of agroforestry, plantation forestry and natural forests and their management in the context of sustainable development.

There are excellent employment and career opportunities for Environmental Foresters with the above knowledge and skills in government agencies, development agencies, private sector and also as freelance consultants at national, regional and global levels.

Key features

The programme is targeted to provide necessary knowledge and skills on principles and practices of agroforestry, plantation forestry, forest and wildlife ecology, natural forest management, policy and legislations related to forestry and environment, systematics, biodiversity, genetic conservation and improvement and also on forest influences on climate, soil and water. It also discusses issues on climate change and its impact on forestry, ecotourism, benefit sharing, rural development forestry, urban forestry and arboriculture, GIS, environmental and economic applications in agroforestry and forestry.

The programme consists of classroom and field level lectures, field visits and forest excursions. During the programme students will be able to interact with professional foresters, environmental specialists, developmental specialists, agriculturists and conservation professionals. Compulsory subjects of the programme will provide a solid foundation required but flexibility exists when selecting subjects according to the requirement of professional careers and interests. Students can also undertake a research project, thesis or pilot study depending on the area of specialization. After completing the programme graduates will have a firm theoretical foundation and practical experience on environmental forestry and will have competencies needed for working as a researcher, forest manager or consultant in universities, government ministries, district forest offices , private sector organizations or international organizations.

Code	*Title*	*Credits*	*Option*
First Semester			
CS 5110	Forest Ecology	2	Compulsory
CS 5111	Agroforestry	2	Compulsory
CS 5112	Plantation Forestry and Environment	2	Compulsory
CS 5113	Forest Influences on Soil, Water and Climate	2	Compulsory
CS 5114	Biodiversity	2	Compulsory
CS 5115	Policy and Legislation Related to Forestry and Environment	1	Compulsory
CS 5117	Economics of Environmental Forestry	2	Compulsory
CS 5116	Forest Systematics	2	Elective
CS 5118	Forest Products and Utilization	1	Elective
AE 5152	Environmental Impact Assessment	2	Elective
SS 5106	Environmental Pollution and Control	2	Elective
Second Semester			
CS 5213	Participatory Forest Management	2	Compulsory
CS 5214	Natural Forest Management	2	Compulsory
CS 5215	Ecological Interaction of Trees and Crops	2	Compulsory
CS 5216	Urban Forestry and Arboriculture	2	Compulsory
CS 5298	Directed Study	5	Compulsory

Note: Course list continued on next page

CS 5203	Climate Change and Crop Production	3	Elective
CS 5211	Tree Crop Physiology	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective
CS 5217	Forest Tree improvement and Genetic Conservation	2	Elective
CS 5218	Quantitative Techniques in Forestry	2	Elective
CS 5219	Advances in Agroforestry	1	Elective
CS 5220	Forest Growth Modelling	2	Elective
AE 5209	GIS for Natural Resources Management	2	Elective
AS 5222	Wildlife Environment	3	Elective
PP 5253	Insect Pests and Diseases of Forests	2	Elective

Forestry Laboratory

M Sc. in Horticulture

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: All applicants should possess a B.Sc. degree in Agriculture, Plant Sciences or equivalent qualifications acceptable to the Senate of the University of Peradeniya. Students holding non-agricultural degrees required to follow prerequisite courses in consultation with the programme coordinator.

Overview

Horticulture is a dynamic and colourful sector of agriculture. It has been a part of a day-to-day life for centuries and is an internationally acclaimed commercial venture today. In many horticultural products, various links of the production chain operates to distribute them worldwide. In this way, the sequence of breeding, seedling production, crop cultivation, processing, marketing and consumption of fruits, vegetables and flowers is spread around the world. Thus, frontiers of horticulturists are being broadening out from the conventional production and post-harvest aspects to much more skillful managerial, accreditation, marketing and service orientated business needs.

The real benefits of the fruit crops, vegetable crops and ornamental plants are lacking in Sri Lankan gardens, orchards, greenhouses and commercial fields due to improper crop management, inadequate post-harvest technology, low product diversification and defective marketing. The Master of Horticulture offers impressive array of courses and practices of modern technologies to develop man-power in the horticulture sector to improve this situation the horticulture industry in Sri Lanka.

There are excellent employment opportunities in the horticulture industry, such as cultivation or sales consultants, product developers or salespersons. Graduates are also employed as researchers at government research institutions, or as teachers at schools and technical colleges.

Up coming services and industrial sub sectors in the Sri Lankan and global economies would open up more employment opportunities for qualified horticulturists in the future.

Key features

The Master of Horticulture is designed to produce trained and experienced professionals having an up-to-date knowledge and practical skills in horticulture and natural sciences. The program offers courses on principles and practices of horticultural crop production. The course package of the degree program includes a wide range of courses to provide in depth knowledge on the Horticulture Industry.

The program will provide integrated training in plant breeding, biotechnology, biochemistr y, agronomy, diagnostics, pest management and pest-control, with commercial as well as sustainability measures derived from production planning, market intelligence, eco-friendly farming, quality assurance, statistical measures and business planning.

The program consists of classroom lectures, field visits, laboratory and farm practices. During the program students will be able to interact with professionals, researchers and scientists from the Horticulture Industry. Compulsory subjects will provide supplementary knowledge for horticulture. However, there is a flexibility to select subjects according to student requirements. In the second semester students will conduct a research study depending on their requirements and interests.

After completing the program students will be able to develop their own business ventures or be employed as researchers, managers, consultants, or university academics in Horticulture and related fields.

First Semester			
Course No.	Course Title	Credits	Option
CS 5132	Sustainable Garden Management	2	Compulsory
CS 5133	Plant Nutrient Management in Horticultural Crops	2	Compulsory
CS 5108	Fruit Crop Management	2	Compulsory
CS 5109	Olericulture (Vegetable Crop Culture)	2	Compulsory
CS 5129 *	Production Horticulture	3	Compulsory
CS 5107	Protected Culture	2	Elective
CS 5119	Landscape Horticulture	3	Elective
CS 5120	Commercial Nursery Management	2	Elective
CS 5122	Plant Growth Regulators	2	Elective
CS 5123	Plant Tissue Culture	2	Elective
CS 5134	Propagation Techniques for Horticultural Crops	2	Elective
CS 5135	Horticulture in the Temperate Region	2	Elective
CS 5136	Value Addition for Horticultural Produce	1	Elective
EC 5104	Agricultural Marketing I	2	Elective
AB 5108	Principles of Plant Breeding	2	Elective
AE 5118	Principles of Post-harvest Biology and Technology	2	Elective
Second Semester			
CS 5232	Physiological Basis of Horticultural Crop Production	2	Compulsory
CS 5233	Bioactive compounds in Fruits and Vegetables	1	Compulsory
CS 5298	Directed Study	5	Compulsory
PP 5259	Insect Pest Management in Horticultural Crops	2	Compulsory
CS 5206	Post-harvest Physiology and Management of Horticultural Crops	2	Compulsory
CS 5222	Commercial Floriculture	3	Compulsory
CS 5235	Entrepreneurship Developments in Horticulture	1	Elective
CS 5236	Biotechnology in Horticultural Crops	2	Elective
CS 5202	Weed Control	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective
CS 5216	Urban Forestry and Arboriculture	2	Elective
CS 5223	Indoor Gardening for Interior Decorations	2	Elective
CS 5226	Advanced Greenhouse Production and Technology	2	Elective
ST 5155	Design and Analysis of Experiments	2	Elective
SS 6201	Techniques for Efficient Plant Nutrient Management	2	Elective
PP 5254	Disease Management in Floricultural Crops	2	Elective
AB 5217	Breeding Strategies of Economic Crops	2	Elective

* Compulsory for non agriculture graduates

Master of Tropical Agriculture

No. of Credits: 60
Minimum Programme Duration: 4 semesters

Entry Requirements: Applicants with B.Sc. Degree in Plant Sciences or related science acceptable to the Board of Study Crop Science and non agricultural graduates with at least 2 years of experience in the field of Agriculture acceptable to the Senate of the University of Peradeniya.

Overview

Tropical countries are the centre of origin and domestication of most important food crops of the world. Furthermore, climatic, soil and topographic variations within the tropics are high, resulting in a large number of agro-ecological regions. As a consequence the tropics are rich in biodiversity of flora and fauna. In terms of agro-biodiversity the tropical agricultural ecosystems are no exceptions. Therefore, sustainable management of agricultural systems with the aid of modern science will help to alleviate hunger and poverty in developing countries in the tropical zone.

In this context, the Master of Science in Tropical Agriculture programme is designed to provide a multidisciplinary approach to expand the overall background in the basic and applied management of natural resources for agricultural development in tropical environments.

The programme is structured to train students for challenging jobs in research and developmental organizations, government departments and institutes, and international organizations involved in food production and supply in tropical countries.

Key features

The Master of Tropical Agriculture is a two year full time programme, which explores the potential to achieve goals of stakeholders in the agriculture sector in tropical regions by providing production-oriented training. The can-didates would complete a well designed programme on tropical agricultural systems, with a major focus on the key crops, livestock and environmental issues.

The first two semesters of the programme consists of lectures, field and farm visits. Students will also be exposed to Agriculture in dry areas by providing field practical training. During this period students will have opportunity to work with farm families in the dry environments, work with government officers directly involved in agricultural development in these regions and have hands-on experience where they can put theory into practice. Students are expected to undertake a research project based on their area of specialization during the second year.

The curriculum is designed to prepare graduate students, especially, non agricultural or foreign graduates to become open minded, well-trained professionals in sustainable agricultural land use of integrated tropical agro-ecosystems.

Code	*Title*	*Credits*
First Semester		
CS 5128	Integrated Crop-Livestock Farming Systems in the Tropics	Prerequisite
PP 5156	Integrated Pest Management in the Tropics	Prerequisite
CS 5124	Field Crops in the Tropics	2
CS 5125	Tropical Cropping Ecosystems	2
CS 5126	Tropical Environments and Farming Systems	2
CS 5127	Tropical Plant Diversity and Ethno-Botany	2
AS 5154	Tropical Animal Production I	3
AE 5166	Water Resources Management for Tropical Agriculture	3
SS 5155	Management of Tropical Soils	3
EC 5105	History of Agricultural Policies in Sri Lanka	2
ST 5155	Design and Analysis of Experiments	2
Second Semester		
CS 5229	Plantation Agriculture in the Tropics	2
CS 5230	Tropical Horticulture	2
AS 5214	Livestock Health and Hygiene	2
AS 5254	Tropical Animal Production II	3
EX 5110	Development Extension and Education	2
Second Year		
	Research Project	30

Sri Lanka has been identified as one of the 34 global biodiversity "hotpots" by the Conservation International. Sri Lanka's lowland rainforests, *montane* rainforests and south-western rivers and streams are listed in the WWF Global 200 eco-regions as one of the most biologically distinct terrestrial, freshwater, and marine eco-regions of the planet

Food Science & Technology

Programmes

- Master of Food Science & Technology
- Master of Food & Nutrition
- M.Sc. in Food Science & Technology
- M.Sc. in Food & Nutrition
- Master of Philosophy (M.Phil.)
- Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study in Food Science & Technology is the Postgraduate arm of the Department of Food Science & Technology of the Faculty of Agriculture, which was in existence since the beginning of the Postgraduate Institute of Agriculture. The Board introduced two degree programmes to accomplish the requirements of the country in the areas of Food Science & Technology and Food and Nutrition. The postgraduate degree programme in Food Science & Technology was first established with the objective of producing manpower capable of handling the technical, advisory, marketing and managerial functions of the food industry and taking up research leading to product development. The courses were designed providing greater opportunities for students to link with the rapidly expanding food industry locally and abroad. In addition to the services of qualified staff in the University, the teaching and research programme was strengthened by the services from eminent personnel in the food industry who were intimately linked with developing, offering and upgrading the said degree programme.

The Food and Nutrition degree programme was introduced as the second degree programme of the Board of Study in 1996 to produce manpower qualified in handling nutrition related issues in the food industry, health sector and the community. The programme was designed as a blend of multidisciplinary subjects to suit the needs of those in the food industry, medical and nursing officials, dieticians, managers, planners and other officials handling food and nutrition programmes. In addition to the science of human nutrition, students receive training in a range of socioeconomic aspects viz. planning and management of food and nutrition programmes, sociology of food and nutrition, economics of nutrition, dietetics and nutritional status assessment in the community, which make them qualified nutritionists who can serve in the food or health sectors, anywhere in the world.

The Board of Study provides necessary facilities for postgraduate students to be engaged in full-time studies, making use of excellent laboratory facilities available in the Department. The programmes have undergone several revisions from time to time to suit the needs of the country's development, and today they stand as popular subject areas in the Postgraduate Institute of Agriculture.

Master of Food Science & Technology

Overview

Food Science & Technology is a rapidly expanding field in Sri Lanka and the food industry is presently the second largest foreign exchange earner, next to the garment industry. Small and medium scale food industries, mostly targeted at the export market, are emerging rapidly and there is a demand for skilled manpower capable of handling production, quality and safety and managerial functions in the food industry. In addition to above tasks, large scale food industries require personnel capable of engaging in research, new product development and handling food regulatory issues. Some enterprising young students may be interested in starting up their own business. Upon successful completion students will be confident to take up any food-related employment in local food industry/ in a foreign country or start their own business.

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Applicants should possess a Bachelor's degree in Agriculture, Food Science or Natural Sciences from a recognized institute of higher education acceptable to the Senate of the University of Peradeniya.

Key features

The modern food industry is highly competitive and quality and safety are two key elements in its success. These two aspects are adequately emphasized in this postgraduate curriculum. In addition, emerging fields such as functional foods and nutraceuticals are given due consideration through course work and research. In order to successfully compete in the global market a food scientist/technologist should be well equipped with the up-to-date theoretical knowledge as well as practical skills in the subject area. The postgraduate (Master/M.Phil./ Ph.D.) Food Science & Technology degree programmes have been developed to be of international standard and are conducted by highly qualified staff in the country having na-tional and international experience in both technical and advisory capacities. Furthermore, adequate laboratory facili-ties are provided for skills development.

graduate degree programmes (masters/M.Phil./ Ph.D.) prepare students to become well- rounded Food Scientists/Technologists or successful Entrepreneurs.Masters of Food Science & Technology and Master of ood & Nutrition Programmes are offered at PGIA Peradeniya and PGIA Colombo branch.

Code	*Title*	*Credits*	*Option*
First Semester			
FT 5102	Food Physics	2	Compulsory
FT 5103	Biochemistry	3	Compulsory
FT 5104	Food Chemistry	2	Compulsory
FT 5105	Food Microbiology	2	Compulsory
FT 5106	Food Preservation	2	Compulsory
FT 5199	Seminar	1	Compulsory
FT 5107	Science and Technology of Commodity Processing	2	Elective
FT 5111	Food Safety	2	Elective
FT 5112	Food Protection Systems	2	Elective
FT 5114	Nutritional and Health Aspects of Food	2	Elective
FT 5154	Functional Foods and Nutraceuticals	2	Elective
FT 5155	Food Biotechnology	2	Elective
FT 5156	Food Regulations and Quality Management Systems	2	Elective
FT 5157	Beverage Technology	2	Elective
ST 5155	Design & Analysis of Experiments	2	Elective
Second Semester			
FT 5204	Industrial Exposure	1	Compulsory
FT 5222	Food Process Engineering and Unit Operations	2	Compulsory
FT 5223	Food Analysis	3	Compulsory
FT 5224	Sensory Evaluation of Foods	2	Compulsory
FT 5298	Directed Study	5	Compulsory
ST 5204	Nonparametric Statistics	2	Compulsoty
FT 5201	Food Plant Layout and Operations	1	Elective
FT 5203	Production and Marketing Operations in Food Manufacturing Organizations	2	Elective
FT 5205	Cereal Chemistry and Bakery Products Technology	3	Elective
FT 5206	Horticultural Products Technology	2	Elective
FT 5207	Meat and Fish Science and Technology	3	Elective
FT 5208	Poultry and Egg Products Technology	2	Elective
FT 5209	Processing of Milk and Milk Products	2	Elective
FT 5210	Processing of Kernel and Nut Products	1	Elective
FT 5211	Spice Processing Technology	1	Elective
FT 5213	Techniques in Research and Scientific Writing	2	Elective
FT 5221	Food Lipids	2	Elective
FT 5226	Consumer-Driven Food Product Development	2	Elective


Particle with negative
surface charge

Master of Food & Nutrition

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: The applicants should possess a Bachelors degree in Agriculture, Natural Science or an equivalent qualification from a recognized institute of higher education acceptable to the Senate of the University of Peradeniya.

Overview

It is widely recognized that the improvement of nutrition situation in a country requires a multi-disciplinary approach and that a collective effort by professionals from the health sector, agricultural sector, food industry and social sciences is needed to achieve this goal. It is imperative that all professionals engaged in uplifting a country's nutritional situation, including medical professionals, should have a sound scientific knowledge and practical skills in all aspects of nutrition. Sri Lanka is beginning to appreciate the role of nutrition in the country's development and the long-term health and prosperity of its nation as evident by the incorporation of nutrition in the portfolio of the Ministry of Health and by several undergraduate and postgraduate degree programmes recently established in the country in this emerging field. The Food and Nutrition postgraduate degree pro-grammes (Masters/M.Phil./Ph.D.) offered by PGIA since 1998 has attracted graduate students from all stakeholders of nutri-tion (from the food industry, universities, health and agriculture sectors, NGO's) and has been producing nutritionists/ dietitians capable of handling nutrition-related problems in the community, food industry and the health sector both private and government of the country.

Key features

The nutritionist/dietitian, whose primary role is preventive rather than curative, should be able to understand the multi-disciplinary nature of the nutrition problem and be prepared to work as a multi-disciplinary team of professionals in solving nutrition problems. The Food and Nutrition postgraduate curriculum in the PGIA is carefully designed as a blend of multi-disciplinary subject areas covering core nutritional science subjects of biochemistry, human nutrition, community nutrition, nutritional and health aspects of food, dietetics, nutrition epidemiology, nutritional assessment, nutritional genomics and social science subjects of food & nutrition economics, sociology of food & nutrition, nutrition advocacy and counselling, planning and management of food and nutrition programmes together with basic food science subjects (principles of food science, food microbiology, food safety, food analysis, food lipids, functional foods and nutraceuticals) and adequate practical any nutrition related assignment in the community or in food industry. With further practical training in a hospital setting, they could be easily trained as hospital dietitians. Furthermore, the programme is developed and offered by a team of highly qualified academic staff in the discipline including several teachers qualified in the field of human nutrition at Ph.D. level from reputed overseas universities.

Code	*Title*	*Credits*	*Option*
First Semester			
FT 5101	Principles of Food Science	2	Compulsory
FT 5103	Biochemistry	3	Compulsory
FT 5105	Food Microbiology	2	Compulsory
FT 5113	Human Nutrition	3	Compulsory
FT 5114	Nutritional and Health Aspects of Food	2	Compulsory
FT 5199	Seminar	1	Compulsory
FT 5111	Food Safety	2	Elective
FT 5151	Sociology of Food and Nutrition	2	Elective
FT 5152	Sports Nutrition	2	Elective
FT 5153	Nutrition Advocacy and Counselling	2	Elective
FT 5154	Functional Foods and Nutraceuticals	2	Elective
EX 5101	Principles of Communication	2	Elective
ST 5103	Data Analysis Using Statistical Software	3	Elective
ST 5155	Design and Analysis of Experiments	2	Elective
Second Semester			
FT 5198	Directed Study	5	Compulsory
FT 5214	Community Nutrition	2	Compulsory
FT 5215	Assessment of Nutritional Status	2	Compulsory
FT 5216	Planning and Management of Food and Nutrition Programmes	2	Compulsory
FT 5217	Dietetics	2	Elective
FT 5207	Meat and Fish Science and Technology	3	Elective
FT 5209	Processing of Milk and Milk Products	2	Elective
FT 5213	Techniques in Research and Scientific Writing	2	Elective

Note: Course list continued on next page

FT 5218	Nutrition Epidemiology	2	Elective
FT 5221	Food Lipids	2	Elective
FT 5223	Food Analysis	3	Elective
FT 5225	Current Topics in Nutrition	1	Elective
EC 5207	Food and Nutrition Economics	2	Elective

Recent Research

• Colloidal milling as an alternative for homogenization of canned high fat coconut milk, assessment based on physical and microbiological parameters to comply with demeter processing requirements.

• Evaluation of the nutritional value of selected fruits and vegetables grown in Sri Lanka with emphasis on underutilized species and biodiversity.

• Utilization of industrial fruit waste: Extraction, characterization and incorporation of pectin from lime and mango peels for value addition to pasta and ice cream.

• Association between household food security and over nutrition in early adolescence in Colombo City.

• Effectiveness of mother supportive group intervention in childhood nutrition improvement.

• Evaluation and Comparison of the Nutritional Composition of Selected Traditional Cereals, Yams and Pulses Grown in Sri Lanka.

• Composition of antioxidant potential and total phenol content of traditional and improved rice varieties in Sri Lanka.

• Preservation of Ceylon olive with natural preservatives.

• Enzymatic interesterification of sesame and coconut oils to produce nutritionally superior oils and evaluation of their oxidative stability.

• Bioactivities of millet grain phenolic compounds; their bioaccessibility and bioavailability as affected by different food preparation and processing methods.

• Antimicrobial property, antioxidant activity and toxicity level of galangal (*Alpinia galanga*) grown in Sri Lanka and its potential to be used in functional foods.

• Development of Non-Dairy Legume Based Nutritious Drink.

Plant Protection

Programmes

Master of Plant Protection Technology

Master of Molecular and Applied Microbiology

M.Sc. in Plant Protection Technology

M.Sc. in Molecular and Applied Microbiology

Master of Philosophy (M.Phil.)

Doctor of Philosophy (Ph.D.)

About the Board of Study

Plant Protection has gained prominence in intensive agriculture due to the ever increasing losses caused by pest species infesting cultivated crops and harvested agricultural produce. Thus, the mission of the Board of Study in Plant Protection is to educate and train postgraduates on the theoretical and practical aspects of plant protection and to give leadership in this field in government and private agriculture sectors of the country.

The Board offers a number of courses to provide students a substantial scientific knowledge in plant protection and related fields. Students get the opportunities to acquire theoretical knowledge and practical training to deal with pest problems and their management at farm level. The Board undertakes research in Plant Pathology, Entomology, Microbiology, Biotechnology and Nematology, with a major emphasis on environmentally friendly, economically sound and sustainable pest management systems. The Board of Study in Plant Protection works in close collaboration with the scientists of the Department of Agriculture, and national research institutes. The Board also has close links with academics and scientists in Sri Lanka as well as in foreign countries. The Board of Study conducts short term practical training courses for researchers in Molecular Biology and Pesticide Application Technology to pesticide marketing sectors and farmers. The students of the Board of study conduct their Ph.D. research on nationally important issues.

Recent Research

- An investigation of secondary transmission of sugarcane white leaf disease in Sri Lanka
- Diversity of parasitoids of major vegetable insect pests in the mid country region of Sri Lanka
- Impact of microbial biopesticides on host-pathogen interactions of *Rhizoctonia solani* pathosystem of rice (*oryza sativa* L.)
- Investigation of the diversity of predators of insect pests in vegetable ecosystems of mid country regions of Sri Lanka
- Diversity and ecology of leafhoppers (*Hemiptera: Cicadellidae*); mealybugs (*Hemiptera; Psudecoccidea*) and scales (*Hemiptera: coccidae)* in Sri Lanka
- Biological control of cabbage vegetable pests and rice leaf folder using *Trichogramma* egg parasitoids
- Conservation of natural enemies

Master of Plant Protection Technology

Overview

Plant protection is an important aspect of crop production, demanding continuous improvement in pest management technologies and innovative research to develop new crop protection tools that are effective, efficient, sustainable and environmentally and user friendly. A steady demand for crop protectionists exist in local and overseas institutes and organizations involved in education, research and development. Moreover, research opportunities are being created across the world with the understanding of negative consequences of toxic pesticides. Environmentally-safer, green chemicals are the future need for crop protection. Further, non-chemical crop protection tools require continuous improvement with better understanding of biology and behaviour of insects. The objectives of the Master of Plant Protec-tion Technology are to train students to cater the needs of the country and global communities, producing graduates with sound theoretical backgrounds and very high practical skills in all major aspects of crop protection.

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: B.Sc. in Biological Sciences acceptable to the Board of Study in Plant Protection, PGIA and the Senate of the University of Peradeniya

Key features

Students following the Master of Plant Pro-tection Technology programme have the opportunity to study Agricultural Ento-mology, Plant pathology and Weed sci-ences, focusing on any of these disciplines. The programme includes both theory as well as applied courses. In addition, the practicum includes a series of practical projects, facilitating students to develop their laboratory skills. Excursions in the programme expose student to problems existing in the real world. The Directed study facilitates students to develop their skills on proposal writing, conducting research, data collection, data analysis and report writing. Overall, after completing the programme, the student will graduate as a plant protectionist with a sound knowledge on plant protection with all necessary skills as a practical plant protectionist.

Code	*Title*	*Credits*	*Option*
First Semester			
PP 5102	Plant Pathology	2	Compulsory
PP 5103	Insect Morphology	3	Compulsory
PP 5106	Pesticide Toxicology	2	Compulsory
PP 5107	Pesticide Technology	1	Compulsory
PP 5197	Practicum in Plant Protection Technology	2	Compulsory
PP 5198	Directed Study	5	Compulsory
PP 5101	General Microbiology	2	Elective
PP 5104	Insect Physiology	2	Elective
PP 5105	Clinical Plant Pathology	2	Elective
PP 5151	Plant Molecular Biology	2	Elective
PP 5152	Indigenous Technology for Plant Protection	2	Elective
PP 5153	Soil Borne Pathogens and Root Diseases	2	Elective
PP 5154	Epidemiology	2	Elective
PP 5158	Methods of Invertebrate Ecology	2	Elective
PP 5195	Integrated Pest Management	2	Elective
PP 5199	Seminar	1	Elective
CS 5103	Weed Biology	2	Elective
SS 5106	Environmental Pollution and Control	2	Elective
Second Semester			
PP 5202	Insect Ecology and Behaviour	2	Compulsory
PP 5204	Biological Control of Agricultural Pests	2	Compulsory
PP 5210	Acarology	2	Compulsory
PP 5201	Insect Systematics and Identification	2	Elective
PP 5203	Nematology	2	Elective
PP 5207	Plant Resistance to Insect Pests	2	Elective
PP 5208	Molecular Diagnostic for Plant Protection	2	Elective
PP 5209	Postharvest Protection	2	Elective
PP 5214	Molecular Plant Microbial Interactions	2	Elective
PP 5251	Insect Toxins and Insect Transmission of Plant disease	2	Elective
PP 5252	Molecular Virology	2	Elective
PP 5253	Insect pests and Diseases of Forests	2	Elective
PP 5254	Disease Management in Floricultural Crops	2	Elective
PP 5255	Insect Pathology and Microbial Control of Insect Pests	2	Elective
PP 5256	Techniques and Strategies in Plant Molecular Biology	3	Elective
PP 5259	Insect Pest Management in Horticultural Crops	2	Elective
CS 5202	Weed Control	2	Elective
CS 5212	Scientific Writing and Proposal Presentation	2	Elective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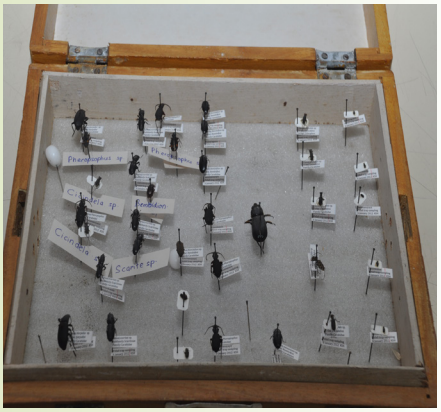


Master of Molecular and Applied Microbiology

No. of Credits: 30

Minimum Programme Duration: 3 semesters

Entry Requirements: B.Sc. in Biological Sciences acceptable to the Board of study in Plant Protection, PGIA and the Senate of the University of Peradeniya

Overview

The Masters degree in Molecular and Applied Microbiology aims to offer graduates the possibility of acquiring extensive and pluridisciplinary knowl-edge on applied microbiology, focus-ing at molecular level. At the end, the graduates complement their theoretical knowledge with hands-on experience on an array of disciplines of microbiol-ogy provided by a team of experienced academics and research scientists. The comprehensive knowledge on theo-retical and practical aspects acquired through the Master's degree in Molecu-lar and Applied Microbiology prepares graduates to undertake challenges in their future careers, either academic or professional.

Key features

Microorganisms play vital roles in the en-vironment, either harmful or beneficial, hence exploration of their applied use, elucidation of the cellular mechanisms at molecular level and exploitation of the microorganisms in the fields of ag-riculture, food industry, biotechnology and medicine are essential.

This degree programme explores the molecular and applied aspects of micro-organisms and integrates the practical skills essential to a practical molecular microbiologist through the intensive practical training in microbiology and molecular biology related techniques.

Code	Title	Credits	Option
First Semester			
PP 5101	General Microbiology	2	Compulsory
PP 5108	Methods in Microbiology and Microbial Technology	3	Compulsory
PP 5109	Molecular Microbiology	2	Compulsory
PP 5110	Microbial Genomics	2	Compulsory
PP 5196	Practicum in Molecular and Applied Microbiology	2	Compulsory
PP 5198	Directed Study	5	Compulsory
PP 5199	Seminar	1	Compulsory
PP 5155	Immunology	2	Elective
AE 5107	Water Quality for Agriculture and Environment	3	Elective
AE 5152	Environmental Impact Assessment	2	Elective
AE 5156	Environment and Industry	3	Elective
AE 5157	Solid Waste Management	2	Elective
AS 5109	Dairy Chemistry	2	Elective
FT 5105	Food Microbiology	2	Elective
FT 5111	Food Safety	2	Elective
SS 5106	Environmental Pollution and Control	2	Elective
SS 5109	Microbial Ecology	3	Elective
SS 5113	Environmental Microbiology	2	Elective
Second Semester			
PP 5211	Microorganisms with Medical Importance	2	Compulsory
PP 5212	Aquatic Microbiology and Water Quality	2	Compulsory
PP 5213	Industrial Microbiology and Biotechnology	2	Compulsory
PP 5214	Molecular Plant Microbial Interactions	2	Compulsory
PP 5208	Molecular Diagnostics for Plant Protection	2	Elective
PP 5252	Molecular Virology	2	Elective
PP 5256	Techniques and Strategies in Plant Molecular Biology	3	Elective
AB 5252	Bioinformatics	2	Elective
AE 5213	Bioreactor and Bio-Environment Design and Control Systems	2	Elective
AS 5207	Dairy Engineering	2	Elective
AS 5217	Microbiology of Dairy, Meat, Fish and Egg Products	3	Elective

Soil Science

Programmes

Master of Environmental Soil Science
Master of Soil and Environmental Microbiology
Master of Tropical Soil Management
M.Sc. in Environmental Soil Science
M.Sc. in Soil and Environmental Microbiology
M.Sc. in Tropical Soil Management
Master of Philosophy (M.Phil.)
Doctor of Philosophy (Ph.D.)

About the Board of Study

The Board of Study in Soil Science focuses on developing research skills of postgraduate students providing with an in-depth knowledge on theoretical aspects and wide practical exposure on applications in Soil Science. The courses offered by the Board of Study cover major sub disciplines including Soil Physics, Soil Chemistry and Mineralogy, Soil Biology, Soil Fertility and Plant Nutrition and Soil Genesis Classification emphasising both environment and agronomic significance. Many courses encompass a practical component making students exposed to a range of laboratory and field analytical techniques. Research students could get an additional exposure to analytical techniques by following courses such as Techniques in Soil Plant, Water and Fertilizer Analysis, Tracer Techniques in Soil and Plant Studies and Advanced Instrumentation. Besides Environmental Pollution and Control, Soil-plant-water Systems, Plant - microbe Interactions, Social and Legal Aspects of Land Management, Land Use and Environment are examples of courses in interdisciplinary nature which are also offered to the students of other Boards of Study as well.

Recent Research

Following are on going research of postgraduate students :

* Establishment of baseline concentration of trace metals in soils
• Quantification of carbon sequestration in agricultural soils
• Assessment of Diversity of soil biota in disturbed soil environment
• Morphology, characterization, classification and mapping of soils of Sri Lanka
• Digital soil mapping using soil information such as digital elevation data, proximal as remotely sensed information at soil legacy data
• Proximal soil sensing for spatial characteristics of soil quality
• Exploring the short scale soil variability to support site-specific management of paddy
• Assessment of greenhouse gas emissions and characterization of responsible microbes
• Assessment of contamination of agro-environments with antibiotics
• Identification of beneficial management practices to enhance the soil fertility
• Production of bio fertilizers for rice and vegetables
• Reclamation of nitrate contaminated groundwater
• Assessment of bio availability of contaminants in soil to plants and humans.
• Speciation of potentially toxic trace elements in soil & water by x-ray absorption fine structure spectroscopy

Master of Environmental Soil Science

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Bachelor's degree in agriculture, science or an equivalent qualification acceptable to the Senate of the University of Peradeniya.

Overview

The Masters Degree in Environmental Soil Science blends the essential theories of biological, chemical and physical scientific concepts in a manner that allows critical examination of environmental quality of the Earth acknowledging the pivotal role played by soils as one of the most important natural resources.

Key features

The students will be trained to assess the impact of pollutants/contaminants on quality of soil, atmosphere and water resources and their specific role in environmental sustainability. Students will be given an exposure to real-world environmental issues and make aware of challenges and has to fond in finding solutions.

With the pressing environmental problems that exist worldwide and the ever-increasing world population, the need for well-trained environmental soil scientists has never been greater. The graduates of environmental soil science always select challenging career paths working with other professionals to solve complex environmental problems.

Code	*Title*	*Credits*	*Option*
First Semester			
SS 5101*	Fundamentals of Soil Science	1	Pre-requisite
SS 5110	Environmental Soil Physics	3	Compulsory
SS 5111	Environmental Soil Chemistry	3	Compulsory
SS 5113	Environmental Microbiology	2	Compulsory
SS 5152	Analytical Techniques in Soil,Plant, Water & Fertilizer	3	Compulsory
SS 5198	Directed Study	5	Compulsory
SS 5199	Seminar	1	Compulsory
SS 5107	Formation and Characteristics of Tropical Soils	2	Elective
SS 5109	Microbial Ecology	3	Elective
SS 5114	Digital Soil Mapping	2	Elective
SS 5156	Water Quality and Environment	2	Elective
SS 6101	Tracer Techniques in Soil and Plant Studies	2	Elective
AE 5152	Environmental Impact Assessment	2	Elective
ST 5155	Design and Analysis of Experiments	2	Elective
Second Semester			
SS 5298	Directed Study	5	Compulsory
SS 5199	Seminar	1	Compulsory
SS 5212	Soils of Sri Lanka	1	Compulsory
SS 5251	Organic Pollutants and Environment	2	Compulsory
SS 5252	Environmental Impact of Inorganic Pollutants and Radio-nuclides	3	Compulsory
SS 6203	Land Use and Environment	1	Compulsory
SS 6204	Remediation of Contaminated Soil and Water	2	Compulsory
SS 5253	Solid Waste and Environment	2	Elective
SS 5254	Environmental Biotechnology	2	Elective
SS 6202	Environmental Soil Mineralogy	2	Elective
SS 6205	Advanced Instrumentation in Environmental Research	2	Elective
SS 6206	Soil Environmental Modelling	2	Elective
SS 6207	Applications of Digital Soil Mapping	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective

** For non-agricultural graduates with the advice of the Board/ Programme Coordinator*

Note: Any course offered from the other degree programmes of the BS Soil Science can be credited pertaining to the PGIA Guidelines and with the consent of the Programme Coordinator.


E1 B1
E2 B1
E1 B4
E2 B3

Master of Soil and Environmental Microbiology

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Bachelor's degree in agriculture, science or an equivalent qualification acceptable to the Senate of the University of Peradeniya.

Overview

Reduction in soil productivity due to intensive agriculture and pollution of water and contamination of the food chain has become a great health concern to humans worldwide..

The Master of Soil and Environmental Microbiology programme is designed to provide an in-depth knowledge on eco-physiology of microorganisms with a greater emphasis on soil inhabitants and to train personnel on designing and developing eco-friendly techniques using soil microorganism for the sustainable management of soil and environmental health.

Key features

The Masters programme in Soil and Environmental Microbiology offers an unique opportunity to be exposed to the interdisciplinary science of microbiology and Soil Science . The potential of applying microbial techniques to solve environment related issues will be discussed emphasising the ecological theories, Impact assessment, legal enactments.

The knowledge and skills acquired by the students following this degree programme enables them to address environment related issues by developing techniques particularly the bio-fertilizer and waste management, remediation soil and water, improve crop production of soil growth, and waste management.

Code	Title	Credits	Option
First Semester			
SS 5108	Soil Ecosystems and their Functions	2	Compulsory
SS 5109	Microbial Ecology	3	Compulsory
SS 5154	Plant-Microbe Interaction	2	Compulsory
SS 5198	Directed Study	5	Compulsory
SS 5199	Seminar	1	Compulsory
SS 5113	Environmental Microbiology	2	Compulsory
SS 5102	Physical Properties and Processes in Soils	2	Elective
SS 5103	Mineralogical and Chemical Properties of Soils	3	Elective
ST 5155	Design and Analysis of Experiments	2	Elective
PP 5108	Methods in Microbiology and Microbial Technology	3	Elective
PP 5109	Molecular Microbiology	2	Elective
Second Semester			
SS 5298	Directed Study	5	Compulsory
SS 5199	Seminar	1	Compulsory
SS 5212	Soils of Sri Lanka	1	Compulsory
SS 5254	Environmental Biotechnology	2	Compulsory
SS 5255	Special Topics Related to Microbiology	2	Compulsory
SS 5207	Reclamation & Management of Problem Soils in Sri Lanka	2	Elective
SS 5251	Organic Pollutants and Environment	2	Elective
SS 5252	Environmental Impact of Inorganic Pollutants and Radio- nuclides	3	Elective
SS 5253	Solid Waste and Environment	2	Elective
SS 6202	Environmental Soil Mineralogy	2	Elective
SS 6203	Land Use and Environment	1	Elective
SS 6204	Remediation of Contaminated Soil and Water	2	Elective
PP 5212	Aquatic Microbiology and Water Quality	2	Elective

Master of Tropical Soil Management

No. of Credits: 30
Minimum Programme Duration: 3 semesters

Entry Requirements: Bachelor's degree in Agriculture, Science or an equivalent qualification acceptable to the Senate of the University of Peradeniya.

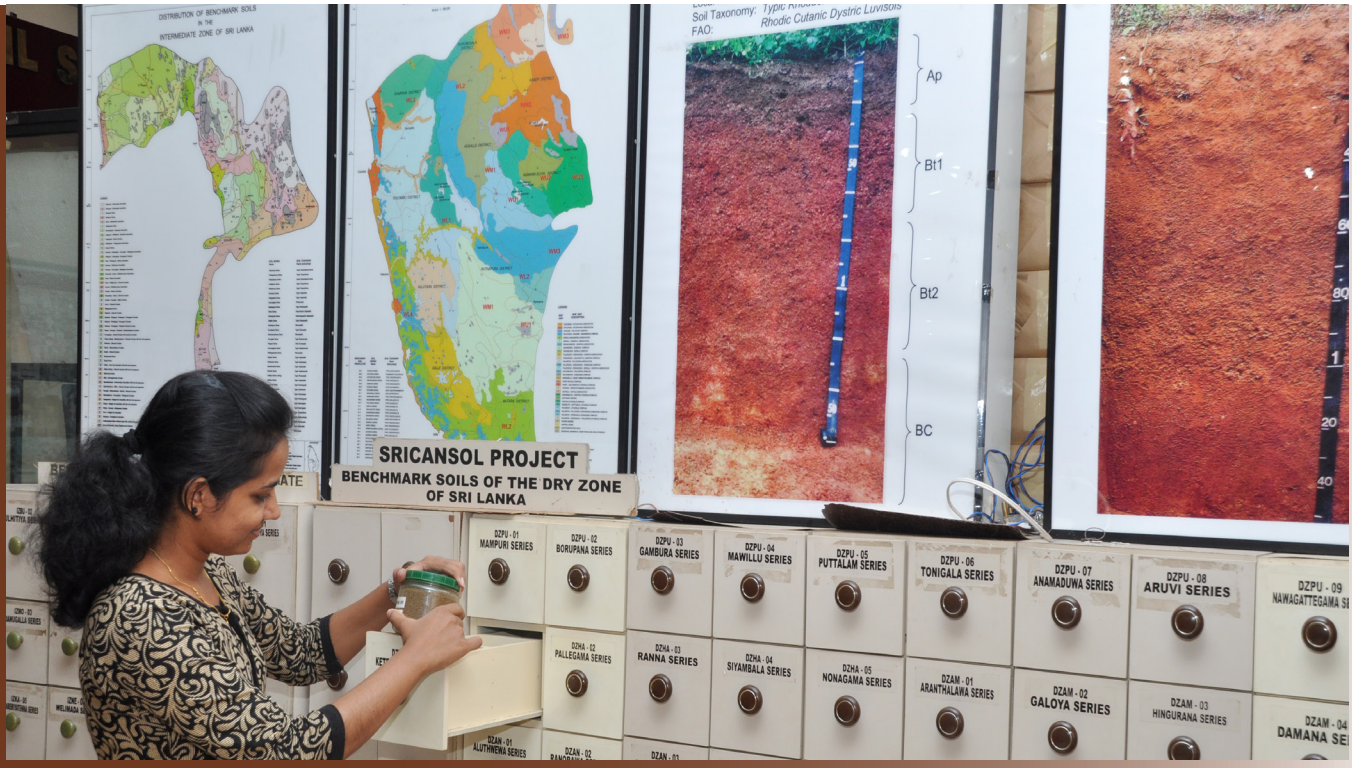
Overview

The Masters degree in Tropical Soil Management provides essential skills and knowledge to manage soils in the tropical regions . The programme is designed to build up the knowledge progressively starting from soil formation to sustainable soil management, paying special interest on soil properties that are unique to the tropical belt. features which are unique to the tropics.

Key features

Courses of the programme range from Soil Genesis to Soil Management providing the necessary theoretical background in Soil Physics, Soil Chemistry, Soil Mineralogy, Soil Microbiology, Soil Survey and Classification, Plant Nutrition, Soil Fertility and Land Use. Courses such as Formation and Characterization of Tropical Soils, Degradation and Conservation of Tropical Soils, Management of Tropical Uplands, Field characterization of Soils and Management of Tropical Wetlands are specially designed for this particular programme.

Code	*Title*	*Credits*	*Option*
First Semester			
SS 5106	Environmental Pollution and Control	2	Compulsory
SS 5107	Formation and Characteristics of Tropical Soils	2	Compulsory
SS 5153	Soil Morphology and Classification	2	Compulsory
SS 5198	Directed Study	5	Compulsory
SS 5199	Seminar	1	Compulsory
SS 5105	Introduction to Tropical Soils	1	Elective
SS 5114	Digital Soil Mapping	2	Elective
SS 5151	Management of Soil Organic Matter	2	Elective
SS 5152	Techniques in Soil, Plant, Water & Fertilizer Analysis	3	Elective
SS 6101	Tracer Techniques in Soil and Plant Studies	2	Elective
ST 5155	Design and Analysis of Experiments	2	Elective
Second Semester			
SS 5298	Directed Study	5	Compulsory
SS 5199	Seminar	1	Compulsory
SS 5201	Soil Fertility and Fertilizers	3	Compulsory
SS 5203	Degradation and Conservation of Tropical Soils	2	Compulsory
SS 5204	Management of Tropical Uplands	1	Compulsory
SS 5205	Management of Tropical Wetlands	1	Compulsory
SS 5209	Land Use Planning	2	Compulsory
SS 5202	Advanced Plant Nutrition	2	Elective
SS 5206	Social and legal Aspects of Land Management	2	Elective
SS 5207	Reclamation & Management of Problem Soils in Sri Lanka	2	Elective
SS 5208	Field Characterization of Soils	2	Elective
SS 6201	Techniques for Efficient Plant Nutrient Management	2	Elective
SS 6202	Environmental Soil Mineralogy	2	Elective
SS 6205	Advanced Instrumentation in Environmental Research	2	Elective
SS 6207	Applications of digital soil mapping	2	Elective
CS 5204	Crop Management Techniques	3	Elective
CS 5208	Organic Crop Production	2	Elective
CS 5212	Scientific Writing and Proposal Formulation	2	Elective


SRICANSOL PROJECT
BENCHMARK SOILS OF THE DRY ZONE OF SRI LANKA
Ap
Bt1
Bt2
BC
DZPU - 01 MAMPURI SERIES
DZPU - 02 BORUPANA SERIES
DZPU - 03 GAMBURA SERIES
DZPU - 04 MAWILLU SERIES
DZPU - 05 PUTTALAM SERIES
DZPU - 06 TONIGALA SERIES
DZPU - 07 ANAMADUWA SERIES
DZPU - 08 ARUVI SERIES
DZPU - 09
DZHA - 02 PALLEGAMA SERIES
DZHA - 03 RANNA SERIES
DZHA - 04 SIYAMBALA SERIES
DZHA - 05 NONAGAMA SERIES
DZAM - 01 ARANTHALAWA SERIES
DZAM - 02 GALOYA SERIES
DZAM - 03 HINGURANA SERIES
DZAM - 04